

Photo on reverse: Lake Elizabeth, Año Nuevo State Park

#### CHAPTER 5: ENVIRONMENTAL ANALYSIS

#### 5.1 INTRODUCTION

#### PURPOSE OF THE EIR

This General Plan for Año Nuevo State Park, with all its sections, constitutes an environmental impact report (EIR), as required by Public Resources Code (PRC) §5002.2 and 21000 et seq. The General Plan is subject to approval, and the EIR is subject to certification by the California Park and Recreation Commission (Commission). The Commission has sole authority for the plan's approval and adoption. Following certification of the EIR and approval of the General Plan by the Commission, Department will prepare the specific management plans and development plans as staff and funding become available. Future projects within Año Nuevo SP, based on the proposals in this General Plan are subject to further environmental reviews and permitting requirements and approval by other agencies, such as Caltrans, the Department of Fish and Game, and the California Coastal Commission.

#### FOCUS OF THE EIR

Notices of Preparation (NOP) for this General Plan were circulated to the appropriate federal, state, and local planning agencies on October 20, 2003. Two NOPs were issued, one for Año Nuevo State Natural Reserve and one for Año Nuevo State Park, and they are being combined in this analysis. Based on known issues affecting the long-term management of the park and on comments received during the planning process, this General Plan and Draft EIR was prepared to address potential environmental impacts that may result from the implementation of the management goals and guidelines, as well as from area-specific management and proposals. Emphasis is given to potentially significant environmental impacts that may result from all future park management, development, and uses within Año Nuevo SP that are consistent with these goals and guidelines.

#### Subsequent Environmental Review Process

The tiering process of environmental review is incorporated into this EIR. Tiering in an EIR prepared as part of a general

plan allows agencies to consider broad environmental issues at the general planning stage, followed by more detailed examination of actual development projects in subsequent environmental documents. These later documents incorporate, by reference, the general discussions from the broader EIR in the General Plan and concentrate solely on the issues specific to the projects [Public Resources Code Section 21093; California Environmental Quality Act (CEQA) Guidelines Section 15152]. This document represents the first tier of environmental review.

As a first tier of planning, this plan provides parkwide goals and guidelines for cultural and natural and physical resource management, visitor access and circulation, recreation activities and facilities, interpretation, visitor experiences, services and visitor safety, trails, concessions, wildfire, aesthetics, sustainable design, operations, community and interagency relations, and acquisition. Future second tier review will provide more detailed information and environmental analysis. At each planning level specific projects will be subject to further environmental review to determine if they are consistent with the General Plan and to identify any potentially significant environmental impacts, mitigation measures and monitoring that would be required by the project.

Mitigation generally requires resource specialists to evaluate the scope of work, identify the cause of the impacts, and specify measures to avoid or reduce the impacts to a less than significant level. More comprehensive environmental review will be possible at the more specific levels of planning, where facility size, location, and capacity can be explicitly delineated, rather than at the general plan level.

#### CONTENTS OF THE EIR

This programmatic EIR includes the following sections:

**Introduction:** This section includes a brief overview of the environmental review process, legal requirements, and approach to the environmental analysis.

**EIR Summary:** The EIR summary represents a summary of potential environmental impacts associated with the proposed General Plan, an overview of the environmental effects of alternatives considered to the preferred General Plan, and a description of any areas of controversy and/or issues that need to be resolved.

**Project Description:** This section provides an overview of the proposed General Plan, which is the focus of the program EIR.

**Environmental Setting:** This section provides a description of the physical environmental conditions in the vicinity of the project from a local and regional perspective. The environmental setting constitutes the baseline physical conditions to determine whether an impact is significant. A complete discussion of the existing conditions is found in Chapter 2.

**Environmental Effects Eliminated from Further Analysis:** This section describes those environmental topics that did not warrant detailed environmental analysis and the supporting rationale.

**Environmental Impacts and Mitigation:** This section analyzes potential environmental impacts associated with implementation of the proposed General Plan.

Other CEQA Considerations: This section contains information on other CEQA-mandated topics, including significant and unavoidable impacts, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts.

Alternatives to the Proposed Project: The alternatives analysis describes the various alternatives to the proposed General Plan (including the No Project Alternative) that are considered in this EIR and the associated environmental effects of these alternatives relative to the proposed project.

#### 5.2 EIR SUMMARY

#### SUMMARY OF IMPACTS AND MITIGATION

Implementation of the General Plan is not expected to result in significant impacts on the environment. Implementation of the goals and guidelines contained in Chapter 4 along with compliance with federal and state laws and regulations avoids potential significant effects or maintains them at a less than significant level. Additional mitigation measures are, therefore, not necessary.

#### SUMMARY OF ALTERNATIVES CONSIDERED

Four alternatives are considered in this EIR, including the Preferred Plan (the proposed General Plan), Moderate Facility Improvements Alternative, Disperse Visitor Access Alternative,

and the No Project Alternative. Descriptions of the alternatives are provided in Section 5.8.

#### 5.3 PROJECT DESCRIPTION

Chapter 4 of this General Plan represents the project description and establishes the overall long-range purpose and vision for Año Nuevo SP. Management goals and supporting guidelines in Chapter 4 are designed to address the currently identified critical planning issues and to mitigate the adverse environmental effects of uses that would be permitted in Año Nuevo SP. In accordance with the goals and guidelines, site selection criteria would be used to avoid adverse environmental effects of uses that would be permitted in the park.

Planning areas are identified that will guide parkwide land use decisions, visitor use areas, and development proposals. This Environmental Analysis focuses on the environmental effects of the preferred plan for six separate park planning areas: the Entrance and Interpretive Center Zone, the Wildlife and Dune Protection Zone, the Cascade Ranch Zone, the Lake Elizabeth Zone, the Quiroste Valley Zone, and the Backcountry Zone. See Figure 12 for location of planning areas, and Chapter 4 for complete descriptions. The General Plan proposals improve and expand existing resource protection; provide park improvements enhancing current and future coastal park visitor use; and establish new park visitor access and recreation opportunities to inland park areas. The following is a summary of the General Plan's land use, development, and visitor opportunity proposals:

In the **Entrance and Interpretive Center Zone**, the General Plan proposes to:

- Continue this area's function as the park's primary visitor orientation and interpretation center. The visitor center will also provide information to encourage visitors to explore other areas of the park.
- Upgrade the existing entrance and area parking to reduce potential user conflicts, traffic congestion, and to improve non-vehicular circulation.
- Protect and rehabilitate the Dickerman-Steele Ranch historic buildings and sites for appropriate adaptive uses and provide park orientation, interpretive programs, park tour staging areas, visitor services, and day use facilities.

- Continue to provide appropriate employee residence sin this zone for security and surveillance purposes.
- Enhance access to Año Nuevo Bay beaches by formalizing the existing access trail and the Caltrans right-of-way parking area at the southern park boundary.
- Establish a viewpoint near the historic highway bridge at Año Nuevo Creek and preserve the expansive coastal and ocean views.

In the **Wildlife and Dune Protection Zone**, the General Plan proposes to:

- Establish a Natural Preserve sub-classification of approximately 800 acres of the coastal dune ecosystem and coastal grasslands west of State Highway 1, including Año Nuevo Island, to establish special protection for sensitive natural and cultural features. This expanded area includes the existing "Wildlife Protection Area," which was established to protect northern elephant seals and their breeding habitat.
- Provide greater protection of cultural and natural resources from visitor use impacts and elephant seal activity.
- Protect and restore sensitive habitats in the northern coastal dune complex. Use boardwalks and trail delineation to provide public access while protecting and interpreting resources.
- Provide visitor access on designated trails, including extensions of the California Coastal Trail, through the Natural Preserve. Establish trail connections between the Año Nuevo Point and the Franklin Point areas.
- Explore possibilities for a regional coastal trail connecting destinations such as Pigeon Point, coastal portions of Cloverdale Coastal Ranches, and Bean Hollow State Beach to the north. This should be a part of a regional trail network.
- Establish an appropriate buffer area (approximately 100 feet) between the Natural Preserve and State Highway 1, existing development, roads, and areas managed for more intensive visitor use. Developed areas, such as staff housing and parking, will be located outside of the Natural Preserve.
- Provide maritime history interpretive information at the Franklin Point viewpoint. Evaluate the potential for



Elephant seals at Año Nuevo Point during molting season



Boardwalk over the dunes to Franklin Point, Año Nuevo SNR

- additional formalized viewpoints and interpretation along the northern coast.
- Provide a staging area for school group tours, separate from the general visiting public, in order to improve tour management, visitor safety, and parking conditions.
- Coordinate with Caltrans to improve the function and safety of day use parking areas and coastal access along State Highway 1. Enhancements could include resurfacing, striping, signs, screening, restroom facilities, and highway turnouts.
- Coordinate with Caltrans to provide appropriate and safe trail connections across State Highway 1 between coastal and inland park properties. Provide appropriate trail markers and maps.
- Coordinate with the Department of Fish and Game to determine the need and potential for improved parking and access facilities at the Gazos Creek coastal access (CDFG and California State Parks ownerships).
- Coordinate with the Peninsula Open Space Trust Cloverdale Coastal Ranches to establish an inland trailhead and interpretive facilities at Gazos Creek Rd. and State Highway 1.
- Maintain park signs that clarify property boundaries to minimize public/private use conflicts along trails adjacent to agricultural and other private lands.
- Accommodate research activities on Año Nuevo Island to ensure a high level of protection of cultural and marine resources. The Department should continue agreements with U.C. Santa Cruz, Point Reyes Bird Observatory, and other entities currently using the island, for their continued occupancy of the fog signal building and to provide management guidelines for the appropriate treatment and protection of this building.

#### In the Cascade Ranch Zone, the General Plan proposes to:

- Preserve and protect the historic character of the Cascade Ranch.
- Initiate appropriate management actions for treatment and protection of the following historic sites and features:
  - Stabilize the Cascade Ranch Horse Barn.
  - Provide a treatment plan for the Steele Family Cemetery.

- Develop maintenance guidelines for the historic water system at Cascade Ranch in order to avoid, minimize, or reduce negative impacts.
- Develop facilities for visitor day use and park operations to enhance the visitor's enjoyment and appreciation of the cultural history and preserve the historic ranch setting.
- Continue staff housing in the Cascade Ranch area. Continue efforts to preserve and maintain historic buildings, including the exterior appearance and associated landscape. Additional adaptive uses for interpretive and administrative purposes may be considered.
- Provide a multi-use public access trail (in coordination with adjacent property owners, Cascade Ranch Historic Farm) connecting Cascade Ranch to the Lake Elizabeth area and for shared use of Chalks Mountain Road for public access and visitor parking at Cascade Ranch.
- Consider one of the following two alternative development possibilities for the area immediately south of the ranch complex:
  - Develop vehicle access, trailhead parking, and picnic facilities. Consider providing group day use facilities. Establish safe vehicle access from State Highway 1, with adequate buffers and screening. This road could also provide visitor access to the historic ranch complex and/or authorized vehicle access to park maintenance facilities.
  - Establish park operations and maintenance functions (in support of Año Nuevo SP, Butano SP, and the Rancho del Oso area of Big Basin Redwoods SP). Adaptive use of existing ranch buildings may be considered for these purposes.

#### In the Lake Elizabeth Zone, the General Plan proposes to:

- Develop a day use area to serve as the primary inland trailhead access from Highway 1. Access road and parking should accommodate different types of vehicles (e.g. cars, camper vans, recreation vehicles, horse trailers) to support multi-use of trails and day use facilities. Provide appropriate park and regional trail network information and orientation.
- Park operations may consider alternative use of day use parking lot in the Lake Elizabeth planning zone to

- accommodate enroute campers. No other camping provisions are anticipated in this zone.
- Minimize the visual impact of park facilities with appropriate site planning and screening. Preserve the expansive natural views of coastal foothills and ridges from the highway corridor.

#### In the **Quiroste Valley Zone**, the General Plan proposes to:

- Establish a Cultural Preserve sub-classification of approximately 225 acres of the Quiroste Valley and surrounding viewshed north of Lake Elizabeth and west of Whitehouse Road to establish special protection for the cultural landscape and the cultural resources of the valley.
- Consult with local native California Indian representatives and pursue partnerships or agreements with Native California Indian groups to establish management practices and interpretation of Native California Indian history and protection of significant cultural sites and features located in the Quiroste Valley. This includes vegetation management that replicates valley conditions of the historic Native California Indian occupation.
- Provide visitor access and provisions for appropriate Native California Indian activities and ceremonies as well as interpretation that focus on Native California Indian culture and village life in the Quiroste Valley. Continue use of existing unpaved roads for limited vehicular access. Avoid permanent facilities that are not consistent with the remote undeveloped character of the valley and the cultural landscape management of the valley.
- Limit signage in the Quiroste Valley to that necessary for public safety and orientation, in order to retain the cultural landscape of the pre-European contact valley as much as possible.
- Continue researching traditional Quiroste village structures (i.e. tule structures, Round House) to enhance understanding of Native California Indian occupation of the valley and provide meaningful interpretation.
- Allow for Native California Indian activities and ceremonies, special events, and interpretive program activities that are consistent with the intent and purpose of the Quiroste Valley Cultural Preserve classification. Ensure that cultural, historic, and prehistoric sites and features are protected.

- Provide access road, interpretive viewpoint(s), and trailhead parking. Keep parking out of the valley viewshed. Allow for appropriate trails.
- Provide interpretive information about Native California Indian history and the Quiroste Valley site at access points, vistas, and trailheads, as well as at the main park visitor center. Evaluate, record, and interpret historic resources and features, such as the Portolá expedition and Whitehouse Creek dam at these same locations. Interpretation at viewpoints will provide for meaningful on-site interpretation without detracting from the cultural landscape.

In the **Backcountry Zone**, the General Plan proposes to:

- Provide trailhead access and parking in the vicinity of Gazos Creek Road and Old Woman's Creek Road.
- Develop additional trail camps and/or horse trail camps. Consider the possibilities of these trail camps to also serve as bicycle camps in the backcountry, accessible by multi-use trails. These camps could serve individuals or groups.
- Coordinate with the Peninsula Open Space Trust (POST) to develop trail connections to and through the Cloverdale Coastal Ranches. Establish a multi-use trail connection from Butano SP and Cloverdale Coastal Ranches through Año Nuevo SP to the coast. Incorporate key regional vista points and interpretive signage into the trail system.
- Cooperate with POST to support regional opportunities to develop day use parking, trail access, potential bike staging areas, and appropriate orientation/interpretive and visitor serving facilities on the inland side of Highway 1.

Comprehensive parkwide management plans for natural and cultural resources, trails, fire management, and watershed management as well as recommended coordination with others are also proposed and described in Chapter 4.

#### 5.4 ENVIRONMENTAL SETTING

Existing conditions that characterize Año Nuevo SP, including descriptions of the important resource values within Año Nuevo SP and the regional planning context, are described in Chapter 2.



Old road into the Steele "back ranch"

This General Plan is consistent with other applicable regional plans, such as the San Mateo County Local Coastal Plan and local community and open space plans including the Midpeninsula Regional Open Space District Master Plan and POST's Cloverdale Coastal Ranch Plan.

# 5.5 ENVIRONMENTAL EFFECTS ELIMINATED FROM FURTHER ANALYSIS

The following topics were eliminated for future analysis in the EIR because there is no potential for significant environmental effects resulting from implementation of the General Plan. A brief reason for their elimination is provided for each respective topic.

#### LAND USE AND PLANNING

The General Plan proposals would not result in the division of an established community or conflict with applicable land use plans, habitat conservation plans, or the policies or regulations of any agency with jurisdiction over the project. Therefore no significant land use and planning effects would occur and no further environmental analysis on the effects on land use and planning is necessary.

#### MINERAL RESOURCES

Implementation of the General Plan would not result in the loss of availability of known mineral resources that are or would be of value to the region and residents of the state, or are a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, no further environmental analysis on the effects on mineral resources is necessary.

#### POPULATION AND HOUSING

Año Nuevo SP is a destination for residents throughout California, although most visitors come from the metropolitan areas of northern and central California. Visitation is expected to increase as the State's population grows by 1.4% annually through 2020. Staff at Año Nuevo SP and the people involved in the regional tourist-serving industries primarily live in Santa Cruz and San Mateo counties, and this population is projected to grow approximately 7% between 2000 and 2020 and 3.4% between 2010 and 2020 in San Mateo County. In

Santa Cruz County there is a projected increase of 12% between 2000 to 2020 and 7.3% between 2010 to 2020 (DOF 2007).

Guideline Regional Planning 6 encourages cooperation with other agencies to identify and provide potential shared employee housing opportunities. affordable While implementation of the General Plan would not directly induce regional population growth, additional recreational facilities could attract additional visitation and potentially add to the employment base of the immediate area. Given the latest unemployment rate (U.S. Bureau of Labor 2005 data) in Santa Cruz (6.3%) and San Mateo (4.3%) Counties and the latest housing vacancy rate in San Mateo County (2.5% U.S. Census Bureau 2000) and Santa Cruz (7.8% U.S. Census Bureau 2000), the increase in demand for labor and housing would be met by the existing local population and no additional housing would be needed to serve growth associated with additional visitation. The General Plan does not include proposals for infrastructure that would generate additional growth in the immediate vicinity. For these reasons, no significant population, employment, and housing effects would occur as a result of implementation of the General Plan and no further consideration is necessary for this environmental topic.

Flowers by original Rensselaer Steele home

#### **PUBLIC SERVICES**

The General Plan proposals for new facilities at the park are limited. Existing public services such as fire and police protection, schools, parks, and other public facilities are adequate to maintain acceptable service ratios, response times, and other performance objectives for these services. Therefore, no further environmental analysis is necessary on the effects on public services.

## 5.6 ENVIRONMENTAL IMPACTS AND MITIGATION

The purpose of this section is to identify potential impacts of the project that may be considered significant. This analysis uses criteria from the model Initial Study Checklist (Appendix G of the CEQA Guidelines) and CEQA's mandatory findings of significance (PRC sec. 21083, Guidelines sec. 15065 and sec. 15064.5) as tools for determining the potential for significant environmental effects. A significant effect on the environment is generally defined as a substantial or potentially substantial adverse change in the physical environment.

General Plan proposals include development maintenance of day use and camping facilities, parking areas, trails, multi-modal transportation facilities, and natural resource management activities that could create adverse impacts. The impacts are considered potential because the actual size, location, and design of the proposed facilities or structures have not been determined. All park plans and projects shall be in compliance with state and federal permitting and regulatory requirements and subject to subsequent tier CEQA review and project specific mitigation. Appropriate mitigation specific to detailed project design will be implemented as necessary in later planning and development stages.

Any potential impacts at this programmatic level would be avoided or reduced to a less than significant effect by implementing the General Plan goals and guidelines, as described in the following analysis for each topic.

#### **A**ESTHETICS

This section analyzes impacts related to aesthetic resources that could result from implementation of the General Plan.

#### **Impact Analysis**

Implementation of the General Plan may result in the development of recreational and operational facilities and improvements that would be visible to visitors at designated viewpoints and from Whitehouse Road, Gazos Creek Road, and State Highway 1, which is a State-designated Scenic Highway. If the new facilities are not in context with the existing scenery or if they would introduce light sources that degrade night-time views, significant impacts could result.

With implementation of Guidelines Aesthetics 14 and Aesthetics 20, the coastal and inland viewsheds in Año Nuevo SP would be defined based on the designated viewpoints and would be preserved. This includes guidance for careful site planning, screening, and development in regard to visual quality. The Backcountry Zone management intent describes preservation of inland viewsheds while guideline Lake Elizabeth 5 aims for the preservation of the frontal slope and ridgeline viewsheds from Lake Elizabeth. The Historic Resources guidelines Historic 1 and Historic 2 as well as planning zone management intent statements and guidelines Cascade Ranch 1, Cascade Ranch 2, Cascade Ranch 3, Cascade Ranch 4, and Entrance and Interpretive 1 are intended to preserve historic ranch settings at the Cascade Ranch and the Dickerman Ranch complexes. New facilities

may require night-time lighting that may degrade night-time views within Año Nuevo SP. Guideline Aesthetics 17 would require shielding that would minimize potential degradation of night-time views. Developments outside Año Nuevo SP may also be visible to visitors at designated viewpoints and on the State Highway 1, and the developments may introduce new light sources that would degrade night-time views. With Guideline Regional Planning 7, the Department would submit input to local, State, and federal agencies during the environmental review period of development projects in an effort to encourage mitigation for any potential negative visual impacts. While the decision to implement visual mitigation measures outside Año Nuevo SP is not within the jurisdiction of the Department, it is expected that feasible mitigation measures would be implemented in compliance with State laws. Given the management goals and guidelines for viewsheds, this impact would be less than significant.

Development within the coastal and inland viewsheds could be visible from points within Año Nuevo SP, from lands adjacent to the park, and along State Highway 1. This could degrade the aesthetic value of the scenic views, as well as of night-time views. Implementation of the Aesthetic guidelines (Aesthetics 14, Aesthetics 17, and Aesthetics 20), as well as specific planning zone guidelines regarding visual quality and character, would minimize degradation of the viewshed and night-time views resulting in impacts that would be less than significant.

#### **AGRICULTURAL RESOURCES**

This section analyzes impacts related to agricultural resources that would result from the implementation of the General Plan.

#### **Impact Analysis**

Most of Año Nuevo SP was historically used for coastal farming, dairy production, timber harvesting, grazing and other agricultural purposes. Portions of Año Nuevo SP and adjacent lands are classified as Prime Farmland and Farmland of Statewide Significance. Lands within Año Nuevo SP are not currently used for agricultural purposes but some adjacent lands are currently used for agricultural purposes. These adjacent lands include the coastal terrace area north of the Dickerman Ranch complex and the private portion of the Cascade Ranch along State Highway 1. The inland forested portions of Año Nuevo SP were historically used for timber production and agricultural purposes, but all



Agriculture in the private portion of Cascade Ranch

agricultural and timber harvesting uses have ceased since the incorporation of the property into Año Nuevo SP.

Several coastal Williamson Act preserves are located adjacent to Año Nuevo SP. Implementation of the General Plan would not affect the adjacent agricultural uses, because incompatible uses would not be permitted by the General Plan.

Given that there are no Important Farmland or Williamson Act preserves within Año Nuevo SP, no significant impacts related to the conversion of Important Farmland or areas zoned for agricultural uses would occur.

The General Plan proposes considering providing a separate elephant seal interpretive program access for school groups to a location north of Año Nuevo Point. This location could include a staging area, trail, and some group use facilities. A possible access route from State Highway 1 to this location could be via an existing road easement across private agricultural land. Current use consists of park staff resident and park operations access. Establishment of proposed school group interpretive access would increase traffic and dust on the unpaved road. The traffic frequency can be managed and coordinated through cooperative arrangements with the private landowner and agricultural operations. As such, the impacts related to agriculture are less than significant.

Implementation of the General Plan would not result in the conversion of land designated as Important Farmland or located within the Timber Preserve Zone, or the cancellation of Williamson Act contracts. The impact related to agriculture would be less than significant.

#### AIR QUALITY

This section analyzes impacts related to air quality that could result from the implementation of the General Plan.

#### **Impact Analysis**

The primary sources of air pollutants include construction activities, onsite operational activities, and offsite traffic. New recreational development at Año Nuevo SP may generate additional vehicular traffic to and from Año Nuevo SP. Traffic volumes on highways and local roadways in the area are highest during peak visitation periods. There are no signalized intersections within and in the immediate vicinity of Año Nuevo SP. Instead, motorists may experience some traffic

slowdowns or delays where turning movements occur frequently (e.g., pull-outs, commercial driveways, local roadways). Potential improvements that would be considered include adding turning lanes to reduce congestion related to turning movements. With these improvements, excessive congestions would be avoided, and localized CO concentrations would not exceed air quality standards.

In addition to vehicular traffic, construction activities and onsite operational activities may also generate air pollutants. Development and improvement projects within Año Nuevo SP may be required to obtain "authorization to construct or modify" and "permit to operate" from the Bay Area Air Pollution Control District. Guideline Facilities 6 would require consultation with the APCD to determine if permits would be required. As a part of this permitting process, developments are required to comply with the APCD's rules and regulations on fugitive dust emissions, architectural coating emissions, air toxics, and other air pollutants generated by construction and operational activities. Implementation of air pollutant control measures required by these rules and regulations would minimize the emission of criteria air pollutants from construction activities and operational activities of onsite stationary sources.

Typical recreational uses occurring at the park do not generate odors that would be considered objectionable to most people. Use of materials that can release toxic air contaminants (e.g., regulated herbicides) would be in accordance with state and federal regulations. Given the above, impacts related to air pollutants would be less than significant.

Potential construction activity and motor vehicle use by Año Nuevo SP visitors would result in increases in the emission of air pollutants. Compliance with General Plan guidelines particularly Guideline **Facilities 6** would maintain emissions within acceptable levels. This impact would be less than significant.

#### **BIOLOGICAL RESOURCES**

This section analyzes impacts related to biological resources that could result from implementation of the General Plan.

#### **Impact Analysis**

Implementation of the General Plan would result in the avoidance or minimization of disturbances or losses of sensitive plant communities and special-status plants. The

General Plan includes guidelines that ensure protection of natural resources in the park.

One special plant species, coast wallflower (*Erysimum ammophilum*), is known to occur within Park boundaries. Suitable to marginally suitable habitat exists within the park for 26 other special plant species, which are identified in Appendix G. Among these other species, Hickman's cinquefoil (*Potentilla hickmanii*), is listed as State and Federal Endangered. The Sacramento Office of the USFWS lists another three species as Species of Local Concern, although they have no official state or federal listing status and do not appear on the CNPS lists. These species are pink sand verbena (*Abronia umbellata* ssp. *umbellata*), California saltbush (*Atriplex californica*), and purple owl's-clover (*Castilleja exserta* ssp. *latifolia*).

Undocumented occurrences of these and other specialstatus plant species may be present in Año Nuevo SP, and focused surveys would be necessary to accurately determine the full distribution and extent of special-status plant species in the park. Direct impacts, such as direct removal or damage of special-status plant occurrences, have the potential to occur where facility development or visitor use would be located. Development or expansion of facilities and other ground disturbance activities, including invasive weed abatement activities, would be conducted in accordance with the Natural Resources Management guidelines. Specifically, these guidelines would result in management actions that would inventory and monitor (Guidelines Special Plants 1), and avoid or minimize disturbances or losses of sensitive plant communities or special-status plants (Special Plants 1 and Special Plants 2). As such, direct and indirect impacts to special-status plants would be maintained at a less than significant level. In addition, consistent with Guidelines Vegetation 1, Vegetation 2, Vegetation 3, and Regional Habitat 1, habitat restoration and management of non-native invasive species could potentially increase the quality and extent of suitable habitat for special-status plant species.

As discussed in Chapter 2, the dynamic coastal ecosystem of Año Nuevo SP contains a number of common and sensitive vegetation communities that are valuable habitat for plants and wildlife. Sensitive plant communities in Año Nuevo SP include riparian areas, coastal and valley freshwater marsh, coastal brackish marsh, coastal terrace prairie, and native dune and grassland vegetation. Potential improvements, including potential site development and trails at appropriate non-sensitive resource locations would avoid or minimize impacts to riparian areas, wetlands, and other sensitive plant

communities by implementation of the guidelines contained in the General Plan. These include Guidelines Facilities 1, Facilities 2, Wildlife 3, Access 3, Trails 4, Wildlife and Dune 5, and Lake Elizabeth 4. Therefore, the impact on sensitive natural communities resulting from implementation of the General Plan would be considered less than significant.

Currently, no Habitat Conservation Plans or Natural Community Conservation Plans have been approved in the region. The General Plan is consistent with the Local Coastal Plan, as discussed above under, Land Use and Planning. The General Plan also calls for the Department's active participation in regional conservation planning efforts (Guideline Regional Habitat 1, Regional Habitat 2, Regional Habitat 4, and Wildlife 2). Therefore, implementation of the General Plan would not conflict with plans intended to protect natural resources in the region, and there would not be a significant impact.

Compliance with General Plan Guidelines would ensure that future development and improvements within Año Nuevo SP would not result in significant disturbance or losses of sensitive plant communities or special-status plants. This impact would be less than significant.

Año Nuevo SP supports a variety of terrestrial and aquatic fish and wildlife species, primarily due to its position along the central California coastline. Most of the animals present are locally and regionally common, but as many as 22 special-status fish and wildlife species have the potential to occur in Año Nuevo SP. Construction and maintenance of existing and proposed State Park facilities could result in loss and/or disturbance of habitat and individuals of some of these special-status species. Potential direct impacts could result from development, re-location and/or expansion of facilities, such as trails, parking lots, campgrounds, day-use areas, and visitor centers. Potential secondary impacts on fish and wildlife resulting from increased visitor use could include disturbance from visitor activities (e.g., beachcombing, hiking and camping).

Impacts to terrestrial special-status wildlife species would be avoided or minimized by compliance with state and federal law in accordance with Guidelines **Special Animals 1** and **Special Animals 4**. Impacts to special status wildlife species found in Año Nuevo SP would be less than significant because maintenance or enhancement of existing facilities and construction of additional facilities would require a relatively small amount of ground disturbance and would not be sited in important wildlife habitat areas, in accordance with

Guidelines Wildlife 3, Special Animals 2, Special Animals 3, Special Animals 4, and Special Animals 5. Impacts would also be avoided or minimized by locating facilities away from areas known to support special-status species in accordance with the Management Intent for the Wildlife and Dune Protection Zone; the proposed Natural Preserve designation and classification; and Guidelines Wildlife 3, Special Animals 2, Special Animals 3, Special Animals 4, and Special Animals 5. None of the proposed facilities would involve removal of large tracts of wildlife habitat and none would substantially reduce opportunities for wildlife movement or fish passage, in accordance with Guidelines Wildlife 3 and Wildlife 7. In addition, the opportunity to enhance habitat linkages and buffers around existing resources would be sought, in compliance with Guidelines Wildlife 3, Wildlife 7, Regional Habitat 1, and Regional Habitat 2.

Impacts to marine mammals or other special status species from disturbance by recreation beach users would be avoided or minimized by implementing seasonal closures or restricting beach use if necessary to protect marine mammal haul-outs or other special-status species in accordance with Guidelines Special Animals 1 and Recreation 2. Impacts to special status species in structures would be avoided or minimized by implementing protection measures for special status species in structures prior to initiation of major maintenance, construction or demolition in accordance with Guideline Special Animals 5. Protection and recovery of listed species, such as western snowy plover, would be ensured by implementing Guideline Special Animals 1.

Impacts to aquatic special-status species, including anadromous fish, amphibians and reptiles, would be avoided or minimized by compliance with state and federal law (Guidelines Special Animals 3, Special Animals 4). Guidelines Special Animals 3, Special Animals 4, Geology/Hydrology 7, and Geology/Hydrology 9 establishes that any instream work would be conducted consistent with requirements of CDFG, NOAA Fisheries, and the CWA, and that BMPs to protect water quality would be implemented.

Implementation of the General Plan Guidelines would result in avoidance or minimization of disturbances or losses of special-status fish and wildlife species and their habitat and would also ensure that movement of native fish and wildlife species would not be restricted. This impact is less than significant.

#### **CULTURAL RESOURCES**

This section analyzes impacts related to cultural resources that could result from the implementation of the General Plan.

#### **Impact Analysis**

The General Plan includes goals and guidelines that would ensure protection, avoidance or minimization of disturbances to prehistoric, and historic resources in Año Nuevo SP. There are numerous documented prehistoric resources within Año Nuevo SP, both in the coastal and inland portions of the park. These sites range from small-scale refuse scatters to a prehistoric village site (Site SMA-196) in the Quiroste Valley.

There are also numerous historic buildings, structures, objects, and sites in both the inland and coastal portions of Año Nuevo SP, as well as on Año Nuevo Island. Among these features are two historical ranch complexes in the park: the coastal Dickerman-Steele Ranch and the inland Cascade Ranch. There is existing adaptive use of some historic buildings in these areas such as the park visitor center, interpretive programs, and park staff residences. There are historic archeological sites that have the potential to be disturbed by wildlife, recreational use, or development activities.

Implementation of the Cultural Resource Management Guidelines would protect these resources, thus maintaining any impacts of the implementation of the General Plan at a less than significant level. Specifically, Guidelines **Prehistoric 1**, **Prehistoric 2**, and **Historic 1** would require identification, consultation, and the preparation of inventories to ensure all cultural resources would be identified and thus avoid unintentional destruction of resources. Compliance with Guideline **Prehistoric 2** and **Historic 2** would result in cultural resource guidelines, treatments, and interpretive information for the public that would ensure protection and restoration of cultural resources. Given the management goal and guidelines, there would not be substantial adverse effects on cultural resources present within Año Nuevo SP. This impact would be considered less than significant.

Compliance with the Cultural Resource Management Guidelines Prehistoric 1, Prehistoric 2, Historic 1, Historic 2, Historic 3, Historic 4, Historic 5, Facilities 1, Facilities 2, and Facilities 9 would ensure that future development and improvements within Año Nuevo SP would not cause substantial adverse effects on cultural resources present within Año Nuevo SP. This impact would be considered less than significant.



Walnut tree, Cascade Ranch area, Año Nuevo SP

#### **GEOLOGY AND SOILS**

This section analyzes impacts related to geology, soils, and seismicity that could result from the implementation of the Preliminary General Plan.

#### **Impact Analysis**

Año Nuevo SP is located in a seismically active area. Portions of Año Nuevo SP along the San Gregorio Fault are located in an Alquist-Priolo special study zone, and fault rupture is possible. The main purpose of the Alquist-Priolo Earthquake Fault Zoning Act, passed in 1972 and incorporated into the Public Resources Code as Sections 2621-2630, is to prevent the construction of buildings used for human occupancy on the surface trace of active faults (CGS 2003). Of the known geologic faults in San Mateo County, all show evidence of movement during the past 2 million years and are considered potentially active. Strong seismic ground shaking would occur during a large earthquake, resulting in potential structural damages. The risk of seismic-related ground failure, such as liquefaction or landslide, is moderate to high within Año Nuevo SP. Liquefaction changes water-saturated soil to a semi-liquid state, removing support from foundations and causing buildings to sink. Landslides may occur in areas of gentle slopes due to liquefaction of subsurface materials.

Structures and site development in Año Nuevo SP would be subject to potentially hazardous geologic and soils conditions, including seismic events. The current (1982) Alguist-Priolo Earthquake Fault Zone (APEFZ) map shows existing park buildings and potential park development areas within the APEFZ zone for segments of the San Gregorio Fault. Existing buildings should be seismically retrofitted and potential new buildings should be seismically designed to the highest degree possible to protect the public from an earthquake on the San Gregorio Fault in the vicinity of project sites. Equipment (such as hot water heaters, tall bookcases, etc.) installed as part of a building construction or rehabilitation will be secured to the walls or floor to prevent damage in the event of a large earthquake, in accordance with California Code Building requirements. Implementation Guidelines Geology/Hydrology 2, Geology/Hydrology 3, and Geology/Hydrology 4 as well as compliance with Guideline Facilities 7, the California Building Code, and California Historical Building Code, would maintain the risks of related hazards at an acceptable level, and this impact would be less than significant.

Año Nuevo SP is also located in an area subject to inundation by tsunamis, large ocean waves caused by undersea earthquakes or landslides. Implementation of Guidelines Safety 1, Facilities 7, Facilities 8, and Facilities 9 would ensure that facilities and services within Año Nuevo SP are designed to provide safety to visitors. Implementation of Guidelines Facilities 3, Facilities 7, Facilities 8, and Facilities 9 would ensure that design-specific studies or geologic review are completed prior to development on sites that would subject property or people to significant risks from geologic hazards. All structures developed within Año Nuevo SP will also comply with the standards contained in California Code of Regulations, Title 24, also known as the California Building Code. Future development and improvements would include structural reinforcements and other features required by the California Building Code that would minimize geologic or seismically induced structural damage. Improvements or seismic retrofitting of historic structures will comply with the State Historic Building Code as referenced in Guidelines Geology/Hydrology 4, Historic 3, and Facilities 9. Furthermore, in accordance with Guideline Geology/Hydrology 4, State Park staff will inspect all buildings as soon as possible after a large earthquake to ascertain any damage. Any major damage shall be inspected by a qualified structural engineer before the buildings resume use by park staff or the public. Therefore, geologic and seismic hazards impacts would be less than significant.

In terms of soils and geologic hazards, the primary risks are with soil erosion and natural coastal processes. Some soils within Año Nuevo SP are not suitable for supporting existing or proposed septic systems. In addition, many areas along the coast are prone to landslides due to the seismic activities associated with the San Gregorio Fault and the erosion caused by rainfall and ocean waves. Implementation of the Park Facilities Guidelines Facilities 1, Facilities 2, Facilities 3, and Facilities 4 would ensure that proposed facilities are appropriate for each location and that site-specific planning and studies are performed prior to development to determine site suitability. Implementation of Guidelines Geology/Hydrology 7 and Facilities 7 would help to minimize potential conflicts between structural development and coastal erosion by requiring design-specific geotechnical studies prior to finalization of development plans. Given these goals and guidelines, the potential for soil and coastal erosion impacts caused by park developments would be minimized. Best Management Practices (BMPs) will be used to control soil and surface water runoff during trenching and grading activities. Permanent BMPs for erosion control will consist of properly compacting disturbed areas and appropriate revegetation of disturbed soil areas with native species using seed collected locally, where possible. Where erosion cannot be prevented (e.g., excavation areas and ocean cliff areas), adverse effects (i.e., structural damage and water quality degradation), would be maintained at a less than significant level by avoiding developments in those areas.

The paleontological resources analysis uses criteria from the State CEQA Guidelines Appendix G. According to these criteria, implementation of the General Plan would have a significant impact on paleontological resources if it would:

 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

#### **Impact Analysis**

The General Plan includes guidelines that would ensure protection, avoidance or minimization of disturbances to paleontological resources in Año Nuevo SP.

For specific projects, implementation of the Paleontological Resources Guideline Paleo 1 would require identification, consultation, and the preparation of inventories to ensure all paleontological resources at specific project sites would be identified and thus avoid unintentional destruction of resources. Compliance with Guideline Paleo 1 would include paleontological resources in a park unit archeological resources inventory program that would ensure protection of paleontological resources. Given the management goal and guidelines, there would not be substantial adverse effects on paleontological resources present within Año Nuevo SP. In the discovery paleontological of implementation of Guideline Paleo 2 would protect these resources by requiring consultation with Department cultural resource staff, determining significance, and applying appropriate remediation, as well as compliance with federal and state laws and regulations.

Compliance with the Paleontological Resources Guidelines Paleo 1 and Paleo 2 would ensure that future development and improvements within Año Nuevo SP would not cause substantial adverse effects on paleontological resources present within Año Nuevo SP. Potential impacts would be considered less than significant.

#### HAZARDS AND HAZARDOUS MATERIALS

This section analyzes impacts related to hazards and hazardous materials that could result from implementation of the General Plan.

#### **Impact Analysis**

Implementation of the General Plan would not result in a substantial increase in the use of hazardous materials (e.g., propane, herbicides) within Año Nuevo SP. Day-to-day operation of Año Nuevo SP does not involve the disposal of hazardous materials, and Año Nuevo SP would continue to contract with licensed providers of propane and herbicides. All transport, storage, and use of hazardous materials, as well as the development of new storage tanks or areas, would be in compliance with state and federal rules and regulations. Furthermore, Año Nuevo SP is not located within one-quarter mile of any schools.

Implementation of the General Plan would not be in conflict with the emergency response plans of San Mateo County. Compliance with the Access and Circulation Guidelines and the Safety Guidelines would ensure that safe roadways, facilities, and services are provided to visitors. Implementation of Guideline Safety 1 would ensure cooperation with emergency response agencies. No road closures are planned, and implementation of the Access and Circulation Guidelines Access 2 and Facilities 8 would also ensure that all development areas would be designed to maintain adequate access for emergency vehicles. All buildings would be designed in compliance with the California Building Code, which requires fire safety features in buildings. Implementation of Guidelines Access 1, Safety 2, Safety 3, and Facilities 4 would ensure that visitors are notified of potential hazards by appropriate signage, or directed away from roads and trails that have unsafe conditions. Año Nuevo SP is not located within two miles of an airport.

The General Plan would allow new developments and improvements and would require management actions that that may involve the use of fuels and herbicides. Also, hazardous conditions may be caused by natural phenomena or human uses. Implementation of the General Plan guidelines, as well as compliance with existing codes, rules, and regulations, would maintain these risks at acceptable levels, and this impact would be less than significant.

The General Plan proposes the development of new facilities in the park, potentially increasing the risk of wildfire from

construction activities, campfires, smoking, and other potential fire sources. The General Plan recommends the development of a comprehensive Wildfire Management Plan that will address potential wildfire risks and specify emergency actions for public safety, park structures, and adjacent landowner structures (see Guidelines Wildfire 1 and Safety 1). The Wildfire Management Plan will also specify strategies for pre-suppression measures, such as the creation of defensible space around structures, wildfire education programs, and park fire regulations.

The Department shall follow the fire management policy, including wildfire management (DOM Section 0313.2.1). State Parks is also guided by an Interagency Agreement with Cal Fire concerning wildland fire protection, and has developed quidelines for the protection of structures from wildland fire (2007). These guidelines outline actions to minimize the probability that structures in proximity to flammable vegetation will ignite and burn during a wildland fire. The guidelines consider structural design, maintenance, and specific actions to minimize fuel in the structure ignition zone, defensible space zone, and wildland fuel zone. Some of these actions include, but are not limited to installing fire screens on chimneys; enclosing the area beneath overhanging wooden decks and foundations to prevent accumulations of organic debris below; removing dead organic matter within two feet of any wooden part of the structure; and removing all needles, leaves, and organic debris from roofs, gutters, exterior beams, and decking.

#### HYDROLOGY AND WATER QUALITY

This section analyzes hydrology and water quality impacts that could result from the implementation of the General Plan.

#### **Impact Analysis**

Development and land disturbance in general has the potential to cause adverse hydrologic effects to surface hydrology, stormwater drainage, floodplain functions, and groundwater supplies and movement. Development and the associated construction activities can directly alter drainage courses and runoff patterns. Construction and long-term management actions can also result in soil compaction and impervious surfaces that reduce the net amount of infiltration of runoff into the soil and increase runoff rates and quantities. In addition, the risk of exposure of people and property to flooding and flood hazards can increase if development does not consider the floodplain and natural flooding patterns.

These surface hydrologic features and functions can affect groundwater conditions through alterations of groundwater recharge or interception. Additionally, use of surface and groundwater supplies for management actions (e.g., domestic consumption and irrigation) can adversely alter existing hydrologic patterns, particularly during periods of drought when surface and groundwater resources may be lacking.

The quality of surface and groundwater resources could be adversely affected by facility development and/or increased visitor use. Construction activities (e.g., clearing, grading, excavation, utility installation, trail construction) operations of facilities (e.g., roads, buildings) within and near Año Nuevo SP have the potential to disturb soils and expose soils to the effects of rain and wind. These activities can lead to increases in soil erosion and sediment discharges via stormwater runoff from development sites. Contaminated runoff that enters surface waters can increase turbidity, reductions in prey capture for sight-feeding organisms, and sedimentation of aquatic habitats. Materials such as fuels, oils, paints, and concrete that are used during construction can also contaminate stormwater runoff. Release of hazardous substances to the aquatic environment can have potential harmful effects to fish and other aquatic life. Waste discharges associated with long-term management and visitor activities include petroleum-based contaminants from vehicles, and a variety of inorganic and organic constituents contained in pet and livestock wastes, and direct waste discharges associated with municipal wastewater treatment systems. The extent of potential environmental effects depends on the erodibility of soil types encountered, the types of construction and management practices, the extent and duration of disturbances, the timing of precipitation, and the proximity to receiving waters.

Implementation of the Geology and Hydrology Guidelines for development and management activities within Año Nuevo SP would avoid and minimize the potential water resources impacts described above. Potential hydrologic impacts would be minimized through careful consideration of existing hydrologic conditions (Guidelines Geology/Hydrology Geology/Hydrology 2, Geology/Hydrology 3, Geology/Hydrology 5. Geology Hydrology Geology/Hydrology 9, Geology/Hydrology 10. Geology/Hydrology 12, Cascade Ranch 2, Lake Elizabeth 3), stormwater drainage design and controls (Guidelines Geology/Hydrology Geology/Hydrology 2, 3. Geology/Hydrology Geology/Hydrology 7, and Geology/Hydrology 11), natural floodplain functions and minimization of exposure to flood hazards, and water conservation and water supply developments (Guidelines Geology/Hydrology Geology/Hydrology 5, Geology/Hydrology 12). Potential surface and groundwater quality impacts would be minimized through implementation of standard waste discharge control Best Management Practices (BMPs) for construction and long-term runoff, as Guidelines Geology/Hydrology directed by Geology/Hydrology Geology/Hydrology 5. 3, Geology/Hydrology 7, and Geology/Hydrology 9, as well as consideration of geologic and hydrologic resource limitations in the development of water and wastewater supply systems (e.g., onsite- septic systems), as directed by Guidelines Facilites 3, and Facilities 6. **Facilities** implementation of these goals and guidelines, impacts related to hydrology and water quality would be maintained at less than significant levels.

Development of facilities and additional visitor use have the potential to cause short-term and long-term hydrologic and water quality impacts. The General Plan contains goals and guidelines designed to protect water quality, manage runoff, respect floodplain processes, and address other hydrological issues; therefore, hydrology and water quality effects would be less than significant.

#### **NOISE**

This section analyzes noise impacts that could result from the implementation of the General Plan.

#### **Impact Analysis**

The three primary sources of noise expected within Año Nuevo SP are construction activities, operations of facilities, and vehicular traffic. According to the Office of Noise Control in the State Department of Health Services, which has developed criteria and guidelines for human exposure to noise, 60 dbA is the maximum acceptable noise level for the most sensitive land uses, such as single-family residences.

The U.S. Environmental Protection Agency (EPA) has found that the average noise levels associated with construction activities typically range from approximately 76 dBA to 84 dBA Leq, with intermittent individual equipment noise levels ranging from approximately 75 dBA to more than 88 dBA for brief periods. Given this noise attenuation rate and assuming no noise shielding from either natural or human-made features (e.g., trees, buildings, fences), outdoor receptors within approximately 1,600 feet of construction sites could

experience maximum noise levels of greater than 60 dBA when onsite construction-related noise levels exceed approximately 90 dBA at the boundary of the construction site. Potential sources of noise associated with future development or improvements within Año Nuevo SP may include the operation of a visitor center (large visitor attendance or group activities) and a vehicle maintenance yard. Whereas noise associated with a visitor center or trailhead might be limited to occasional parking lot-related noise (e.g., opening and closing of doors, people talking, interpretive group activities), a maintenance yard may include additional noise sources, such as the operation of hydraulic lifts and air compressors. The area south of Cascade Ranch considered by the General Plan for a potential maintenance yard is located away from the park's primary visitor use areas and trail locations but is in proximity to existing staff housing (approximately 200 feet away), Cascade Falls trailhead (approximately 150 feet away), and the adjacent Cascade Ranch Historic Farm (approximately 800 feet away). Appropriate buffer space, vegetation screening, and site planning can reduce the impact of potential intermittent noise from a maintenance yard.

Future development and improvements would generate additional visitation to Año Nuevo SP or introduce visitors to new park areas, then traffic volumes and the associated noise volumes along roadways would increase. Where the traffic noise level would exceed the State's noise guidelines at sensitive uses along the roadways and where such increases would be perceptible, an adverse noise effect may result.

Guideline **Aesthetics 6** would require that future development and improvements within Año Nuevo SP include implementation of recommendations in noise studies to reduce or avoid negative impacts for any development or improvement projects within Año Nuevo SP that exceed the State noise guidelines. The recommendations, which may include site design changes and limits on hours of operation would protect sensitive uses from unacceptable noise levels, and, as such, this impact would be less than significant.

#### RECREATION

This section analyzes recreation impacts that would result from the implementation of the General Plan.

#### **Impact Analysis**

Management zone designations and sub-unit classifications serve as methods to preserve sensitive natural and cultural

resources while providing for recreation activities and visitorserving facilities. Management zone designations and sub-unit classifications can restrict certain recreational activities in some areas in order to protect sensitive resources or visitor experience, particularly in the Wildlife and Dune Protection Zone, the Cascade Ranch Zone, and the Quiroste Valley Zone. Although the Natural Preserve sub-classification proposed for the Wildlife and Dune Protection Zone precludes overnight camping and development of park facilities such as buildings, parking areas, and roads, it will permit other types of recreation activities, such as interpretive and educational programs and hiking on designated trails. The Cultural Preserve sub-classification proposed for the Quiroste Valley Zone also precludes overnight camping and development of park facilities such as buildings, parking areas, and roads, but it will permit limited low impact recreation activity such as hiking on designated trails. Appropriate recreation activities and park development that are compatible with an area's sensitive resources are identified in the planning zone descriptions found in Chapter 4.

The plan also proposes the evaluation and potential development of new forms of recreation and new technologies to respond to visitor demand (see Guidelines Recreation 2 and Recreation 3). It recommends providing increased opportunities for interpretation and education, and to expand facilities and programs that allow more recreational opportunities in the "shoulder seasons" of spring and fall (see Guideline Recreation 5).

The plan recommends the use of an adaptive management process that would help implement the General Plan's vision and desired conditions for natural, cultural, and recreational resources and visitor experiences in the park. This process would provide an ongoing method to evaluate and avoid or reduce impacts associated with recreational uses, visitor experiences, and park resources. Using the adaptive management process, any potentially significant impacts would be minimized to ensure survival of the park's important values and visitor opportunities as expressed in the General Plan.

The plan's proposals may increase the use of regional parks and recreation facilities by encouraging regional trail and transit connections and interpretation of the natural, cultural, aesthetic, and recreational resources in the region. However, this increased use would be minor and not cause or accelerate significant physical deterioration of the facilities.

Future projects will be subject to additional environmental review. There will not be significant adverse impacts from recreational activities or facilities resulting from the implementation of this plan.

The plan proposes increasing recreational resources at Año Nuevo SP with development of day use and camping facilities, new interpretive facilities, improved and new trailheads, additional walking, bicycling, and equestrian trail opportunities, new scenic viewpoint areas, some adjacent to new group bus or shuttle facilities from park trails to local and regional trails outside the park and alternative transportation stops and parking areas. The plan also calls for recreational facilities to accommodate disabled persons (see Accessibility Goal and Guidelines Accessibility 16, Accessibility 17, and Recreation 4). Planning zone designations and sub-unit classifications associated with allowable visitor use and park development will guide and manage visitor use patterns in a manner that will not adversely impact park resources. Compliance with the Recreation Planning Guidelines and the Park Facilities Guidelines would further ensure future development and improvements as well as recreation activity within Año Nuevo SP would not adversely impact park resources. This impact would be less than significant.

#### TRANSPORTATION AND TRAFFIC

This section analyzes transportation and circulation impacts that could result from the implementation of the General Plan.

#### **Impact Analysis**

The General Plan would permit additional recreational development that may attract additional visitation, that would increase vehicular trips to and from Año Nuevo SP. As there are no signalized intersections in the immediate vicinity of Año Nuevo SP, some brief delays from vehicle stack-ups may occur at the intersection of State Highway 1 with roadways and parking lot driveways as a result of turning movements.

State Highway 1 is a two-lane facility that accommodates both visitor and through traffic. Passing sight distance in some areas is limited by curves and grades. Typical roadway improvement projects all along State Highway 1 may include shoulder widening, passing lanes, intersection improvements to enhance turning movements, and additional roadside parking areas.



Planning team returning from Cascade Falls, Año Nuevo SP

The Access and Circulation Guidelines Access 1 and Access 2 would require the coordination with Caltrans and San Mateo County to ensure the roadways in and around Año Nuevo SP would be maintained and improved, to the extent feasible, in order to provide safe and convenient roadway conditions for motorists, bicyclists, and pedestrians. Potential improvements that would be considered in a comprehensive roadway management plan include adding turning lanes to reduce congestion related to turning movements to avoid hazardous conditions. Implementation of Guideline Access 1 would result in the installation of roadway signage that can orient and inform visitors so that unsafe traffic movement may be minimized and trips associated with disoriented motorists (i.e., visitors spending excessive time on the roads looking for unmarked attractions or facilities) may be reduced. Guidelines Access 2 and Access 4 would encourage the provision of public transportation, alternative transportation modes (pedestrian, bicycle, and equestrian trails), as well as shuttle bus service within Año Nuevo SP. Compliance with Guidelines Access 2 and Trails 8 would encourage the use of bicycles to and from Año Nuevo SP. As such, the General Plan proposals may increase the use of alternative modes of transportation. The Parking Guidelines Parking 1 and Parking 2 would facilitate the development of new parking areas to meet increased demand for parking, as well as removing parking where hazardous conditions exist or where there may be impacts to adjacent sensitive resources. These guidelines would maintain traffic at an acceptable level to the extent feasible and would increase traffic safety.

Implementation of Guideline **Access 2** would help ensure the roadways in and around Año Nuevo SP would be designed to provide adequate access for emergency vehicles. With implementation of these General Plan Guidelines, impacts related to congestion, traffic safety, emergency vehicle access and alternative modes of transportation would be less than significant.

Implementation of the General Plan may increase traffic volume of various transportation modes to Año Nuevo SP during non-commuter-peak periods, and the General Plan would permit roadway improvements. Implementation of management goals and guidelines would ensure traffic safety and adequate capacity; thus, the impact would be less than significant.

#### **UTILITIES AND SERVICE SYSTEMS**

This section analyzes impacts on utility and public service systems that could result from the implementation of the General Plan.

#### **Impact Analysis**

The General Plan would allow the development of new facilities and site improvements that would generate the demand for additional water, wastewater, electricity, propane, solid waste, telephone, law enforcement, fire protection, emergency medical, and road maintenance services.

New water supply and water treatment, storage, and conveyance facilities may be needed for water service and would be built based on new demand associated with specific facility developments. The primary sources of water along the coastal area of San Mateo County are groundwater and the associated springs. The prevalent Franciscan geologic formation yields limited quantities of groundwater, and, as a result, inadequate water supply has been a major constraint for development in the area. The Department may contract with local water purveyors to provide water for Año Nuevo SP, or it may develop new wells or water collection systems. In either case, new development in Año Nuevo SP must demonstrate availability of water supplies before construction activities may proceed, in accordance with Guideline Facilities 3.

There are no sewer systems available in Año Nuevo SP. Thus, new facilities would require onsite wastewater systems (e.g., septic tanks). Many of the soil types in Año Nuevo SP are not compatible with onsite wastewater systems. Sites that are suitable for onsite wastewater systems may be identified through geotechnical investigations. New development in Año Nuevo SP must demonstrate site suitability for onsite wastewater systems before construction activities may proceed, in accordance with Guidelines **Geology/Hydrology** 5 and Facilities 3.

For electricity, propane, and telephone services, the Department will continue to contract with private service providers (e.g., PG&E). For solid waste collection and disposal and road maintenance services, the Department will provide the services or will contract for solid waste collection services and Caltrans for road services. For fire protection services, the Department will coordinate with California Department of Forestry and Fire Protection (CAL FIRE stations are located in

Davenport and Pescadero). Law enforcement within Año Nuevo SP is provided by the State Park rangers. In addition, the Department will coordinate with the San Mateo County Sheriff Department and California Highway Patrol for law enforcement services. Emergency medical services are also provided by rangers. In addition, there are emergency air transport services to hospitals in Santa Cruz and San Jose.

New infrastructure and facilities may be needed to serve the future development within Año Nuevo SP. Adverse environmental effects associated with new infrastructure and services are expected to be typical of the equipment and facility types. In accordance with the Park Facilities Guidelines Facilities 1, Facilities 2, Facilities 3, Facilities 5, Facilities 6, Facilities 4, and Facilities 7, sites for new infrastructure would be selected based on criteria that give preference to environmental compatibility and logistic convenience. If no sites within Año Nuevo SP would meet the site selection criteria, the Department may consider acquiring sites that are suitable to the proposed development, in accordance with Guideline Recreation 7. Construction and operations of the equipment and facilities would be in compliance with state and federal regulations, as well as management goals and guidelines of this General Plan. As such, new infrastructure and services would be environmentally compatible with the resources within Año Nuevo SP, and any degradation of environmental values would not be substantial. Environmental review for new development would be required. While the exact nature of the infrastructure and service needs would not be determined until the development proposals are available, any adverse effects would be mitigated to the extent feasible in accordance with Guideline Facilities 1. This impact would be less than significant.

The General Plan would allow new developments and improvements that would generate an increase in the demand for utility and public services. For law enforcement, fire protection, emergency medical, electricity, propane, telephone, solid waste, and road maintenance services, existing service providers and resource capacities are expected to be sufficient; for water supply and wastewater, site investigation to ensure site compatibility with facility development would be required. As such, the impact would be less than significant.

Potential effects

from projects

### 5.7 OTHER CEQA CONSIDERATIONS

#### UNAVOIDABLE SIGNIFICANT ENVIRONMENTAL EFFECTS

Evaluation at the specificity of this first tier review indicates that the potential effects from projects proposed in this General Plan can be reduced to a less than significant level with appropriate facility siting, the implementation of goals, guidelines, resource management programs, and further reduced with the development of specific mitigation when future site-specific development plans are proposed.

Until uses, locations, and the scope of facilities or management plans are specified, the actual level of impact cannot be determined. However, all plans and projects are required to be in compliance with local, state, and federal permitting and regulatory requirements and subject to subsequent tier CEQA review and project-specific mitigation.

At this level of planning, unavoidable significant effects are not anticipated as a result of the proposals in this General Plan/Environmental Impact Report.

proposed in this plan can be reduced to a less than significant level.

#### SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

No significant irreversible changes to the physical environment are anticipated from the implementation of the General Plan. Facility development, including structures, roads and trails, may be considered a long-term commitment of resources; however, the impacts can be reversed through removal of the facilities and discontinued access and use. Ongoing adverse effects on the environment, if any, can be monitored by staff through adaptive management. The Department does remove, replace, or realign facilities, such as trails and campsites, where impacts have become unacceptable either from excessive use or from a change in environmental conditions.

The construction and operation of facilities may require the use of non-renewable resources. This impact is projected to be minor based on considerations of sustainable practices in site design, construction, maintenance, and operations that are generally practiced by the Department. Sustainable principles used in design, construction, and management, such as the use of non-toxic materials and renewable resources, resource conservation, recycling, and energy efficiency, emphasize environmental sensitivity (Sustainability

No significant irreversible changes to the physical environment are anticipated from the implementation of the General Plan.

Goal and Guidelines Sustainability 1, Sustainability 2, and Sustainability 3).

Destruction of any significant cultural or natural resource would be a significant irreversible effect. To avoid this impact, proposed development sites will be surveyed for cultural resources (Guidelines Prehistoric 1 and Historic 2) and sensitive natural resources (Guidelines Special Plants 1, Wildlife 1, Special Animals 1, and Special Animals 5); all site and facility designs shall incorporate methods for protecting and preserving significant cultural and natural resources; and human activities will be managed to ensure protection of cultural and natural resources.

#### **GROWTH-INDUCING IMPACTS**

State CEQA Guidelines Section 15126.2(d) requires that an EIR evaluate the growth-inducing impacts of a proposed project. Specifically, an EIR must discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth inducement itself is not an environmental effect, but may lead to environmental effects. Such environmental effects may include increased demand on other community and public services and infrastructure, increased traffic and noise, degradation of air or water quality, degradation or loss of plant or wildlife habitats, or conversion of agricultural and natural land to urban uses. The analysis of indirect growth-inducing impacts for the General Plan focuses on two main factors: (1) promotion of development and population growth, and (2) elimination of obstacles to growth.

If implemented completely, the General Plan may indirectly foster economic and population growth in the region. With complete development of all proposals, park visitation is likely to increase. This would be due to the improvements and development of day use facilities, campgrounds, interpretive opportunities, and improvements to park circulation, including new trails and trail connections from the park to regional trails, and mass-transit and multi-modal opportunities to access the park and surrounding areas. Additional directional and informational signage and interpretive information outside the park boundaries (on the highway, in other state and regional parks, and in the community) should raise the park's profile as a destination for the recreational opportunities and appreciation and enjoyment of natural and cultural resources.

Any improvement to recreational facilities, programs, and opportunities or increase in the park's design capacity can encourage increased use, which may create additional tourism and the need for tourist services in adjacent communities, state parks, natural land and recreation areas, and the surrounding region, such as recreation equipment, supplies, food, and related facilities. If visitation to Año Nuevo SP increases, the demand for lodging, restaurants, and other tourism-related businesses and employment in the region would also increase. The extent of such economic effects is unknown at this time, but could indirectly result in additional development in the region wherever permitted by established land use plans and zoning ordinances. The economy of the central California coast depends considerably upon recreation and tourism, and an increase in visitor use may be considered an economic benefit.

The increased visitor capacity and interpretive potential of the plan's proposals may result in the need for an increased number of permanent and seasonal park staff. Even though the General Plan recommends consideration of additional staff housing within the park boundaries, this may result in a minimal housing demand and growth impact to the region.

Development of infrastructure is often cited as a way through which obstacles to growth are eliminated. Additional infrastructure may be developed for the purpose of serving new facilities in Año Nuevo SP. The Department does not typically build infrastructure for the purpose of supporting growth, and none have been proposed for Año Nuevo SP. If development of infrastructure in Año Nuevo SP is proposed, it would comply with current federal and State laws, and subsequent environmental review would be required.

#### **CUMULATIVE IMPACTS**

Cumulative impacts are defined in State CEQA Guidelines Section 15355 as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." A cumulative impact occurs from "the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively significant, projects taking place over a period of time" (State CEQA Guidelines §15355[b]).

Development along the San Mateo Coast and in the Santa Cruz Mountains may contribute to cumulative impacts

associated with the implementation of the General Plan. Maximum development in these areas would be based on the build-out of the San Mateo County Local Coastal Plan and the San Mateo County General Plan. In the vicinity of Año Nuevo SP, future development may include residences in the adjacent Santa Cruz Mountain lands (e.g., Whitehouse Road, Gazos Creek Road). The general intent of the San Mateo County General Plan and LCP in this portion of the County and coast however is to maintain natural and coastal agricultural lands.

The General Plan for Año Nuevo SP was prepared concurrently and in coordination with the general plans for Big Basin Redwoods SP and Butano SP. The planning effort also coordinated as much as possible with surrounding land use planning, resource management, and recreation networks. The result of this is that the General Plan is integrated with surrounding regional open space planning on multiple levels and future land use conflicts should be minimal.

As described above, the facility development and resource management efforts that may occur with the implementation of the General Plan would not result in significant project-level environmental impacts. The goals and guidelines in the General Plan would direct management actions that would preserve, protect, restore, or otherwise minimize adverse effects related to biological resources, cultural resources, aesthetic quality of viewsheds, seismic hazards, water quality, traffic congestion, water supply, etc. These management actions would also maintain Año Nuevo SP's contribution to cumulative impacts to a less than significant level.

# 5.8 ALTERNATIVES TO THE PROPOSED PROJECT

The guiding principles for the analysis of alternatives in this EIR are provided by the State CEQA Guidelines Section 15126.6, which indicates that the alternatives analysis must: (1) describe a range of reasonable alternatives to the project that could feasibly attain most of the basic objectives of the project; (2) consider alternatives that could reduce or eliminate any significant environmental impacts of the proposed project, including alternatives that may be more costly or could otherwise impede the project's objectives; and (3) evaluate the comparative merits of the alternatives. The State CEQA Guidelines Section 15126.6(d) permits the evaluation of alternatives to be conducted in less detail than is done for the proposed project. A description of the project

alternatives, including the No Project Alternative, is provided in this EIR to allow for a meaningful evaluation, analysis, and comparison of these alternatives with the Preferred Alternative, which is the General Plan as described in Chapter 4.

## ALTERNATIVE 1: MODERATE FACILITY IMPROVEMENTS AND INCREASE RESOURCE PROTECTION

#### Description

This alternative provides park improvements enhancing current coastal visitation and also provides minimum improvements and development to establish inland access and recreation opportunities. Park improvements would generally be focused along the State Highway 1 corridor where current and future visitor use is located. Natural and cultural resource goals and guidelines will remain the same as proposed in the Preferred Plan. Resource protection will be enhanced as a result of less inland visitor access, recreation, and development than in the Preferred Plan.

Entrance and Interpretive Center Zone: Proposed access and development improvements will be similar to the Preferred Plan except that there will be no improvement of the Caltrans roadside parking area, Año Nuevo Beach trailhead, or viewpoint development on the park's southern boundary. Resource protection in this zone would be improved as a result of fewer park facilities proposals.

Wildlife and Dune Protection Zone: Proposals will retain low intensity roadside parking access improvements and coastal trail access improvement proposals along State Highway 1. There will be a new separate school group staging area to reduce existing traffic congestion and improve park circulation. All of the Preferred Plan resource protection proposals, including the expanded coastal Natural Preserve, would be included in this Alternative. Existing and proposed trail and boardwalk access in the Natural Preserve would be retained. There would be no expansion of the Gazos Creek parking area, or shared development of an inland trailhead and interpretive facilities with Cloverdale Coastal Ranches at Gazos Creek Road-State Highway 1. Resource protection in this zone would be the same as the Preferred Plan.

Cascade Ranch Zone: Continue existing uses and activities. Existing adaptive use staff housing would continue in the historic buildings. Existing trail access to Cascade Falls would continue. A new multi-use trail connection between

Cascade Ranch and the Lake Elizabeth trailhead facilities would be developed in cooperation with Cascade Ranch Historic Farm. No other new visitor access, activities, or facilities as well as no park operations facilities would be developed at Cascade Ranch in this alternative. Treatment actions necessary for protection and preservation of historic resources is included in this alternative. New adaptive uses for Cascade Ranch historic structures would not be considered. Resource protection in this zone would be improved as a result of fewer park facilities proposals.

Lake Elizabeth Zone: The proposed access, parking, and trailhead facilities are this alternatives' primary access and development proposals for the inland portions of the park. Use of the parking area as an enroute camping location would be an operational option. No other vehicular access-trailhead would be developed in the Cascade Ranch, Backcountry, or Quiroste Valley Planning Zones. Recreation opportunities would consist of access to the existing network of backcountry and regional Santa Cruz Mountains trails and trail camps. Opportunities for developing new additional regional trail connections such as those with Cloverdale Coastal Ranches are included in this alternative. Resource protection in this zone would be the same as the Preferred Plan.

Quiroste Valley Zone: The cultural preserve proposal would be included with this proposal as a means of providing special recognition and protection for the cultural resources and the cultural landscape, however there would be less opportunities for Native California Indian activities and ceremonies as well as interpretive activities because new access improvements into the valley are not included in this alternative. Resource protection in this zone would be improved as a result of fewer park facilities proposals.

Backcountry Zone: The backcountry would offer visitor facilities as in the preferred plan, but in lower quantities. Visitor facilities would include trail camps for individuals and groups; trailheads and multi-use trails that would connect to regional trails, adjacent state parks, and natural areas; and interpretive elements, including vista points and interpretive panels. The opportunity for interpretive or special event shuttle tours is not included in this Alternative. Resource protection in this zone would be improved as a result of fewer park facilities proposals.



Multi-trunked redwood tree by Whitehouse Creek, Año Nuevo SP

#### **Evaluation**

provides facility This alternative improvements development in response to current access and recreation demand. This serves both the existing coastal visitor use patterns as well as allows for new opportunities and dispersal of visitation into inland areas. Improvements to recreation and interpretive facilities that are compatible with the park's natural and cultural resource management goals would be developed in the entrance area of the park. This alternative would achieve many of the General Plan objectives but would limit the use of the entire park by providing minimum access development to inland areas and not expanding existing regional network connections.

Traffic and circulation improvements in the entrance area would be accomplished with this alternative and improvements to informational and directional signage would also occur. With increases in park visitation these improvements will more effectively accommodate the park traffic, circulation, and avoid congestion in the most active area of the park. Although access and activity will be formalized for the inland portions of the park, visitor use and activities would generally continue to be concentrated in existing coastal visitor activity areas of the park.

If this alternative was implemented most improvements to the visitor center, picnic areas, trails, trailheads, and parking would enhance current park activity areas. The facility improvements would serve existing visitor demand for day use facilities and parking improvements along coastal areas and the highway corridor and a limited variety of backcountry recreation experiences, but would not respond to the desire for additional overnight facilities in the backcountry or anticipated future recreation demand.

This alternative would not provide multiple access locations and routes into the backcountry. Also backcountry trail connections to regional natural lands and other nearby state parks would not occur. Current visitor use in coastal areas might become more intensely used on the trails and in the day use areas (picnicking, visitor center, and parking), due to a lack of facilities or more trail opportunities in the inland portions of the park. This area of the park would require increased monitoring by park staff to ensure the desired level of resource protection. The quiet, remote, and wild quality of the outlying coastal areas of this park may change with increased visitor and staff contact and intense visitor use and activity.

As projected park visitation increases, the improvements provided for in this alternative would not meet the expected future park access and recreation demand (particularly in inland areas).

## ALTERNATIVE 2: DISPERSE VISITOR ACCESS AND INCREASE RESOURCE PROTECTION

#### Description

This alternative would provide coastal access and facilities improvements that would enhance some current coastal visitor use along with increased coastal resource protection. Inland access and facilities will be established to serve Cascade Ranch, Quiroste Valley, and the Backcountry Zones as well as Santa Cruz Mountains regional connections to meet current and future recreation demand. Coastal resource protection will be improved with the establishment of a coastal Natural Preserve. This alternative would not designate a Cultural Preserve for the Quiroste Valley to allow for some additional trail and recreation opportunities. Cultural resource protection will be provided by proposed parkwide cultural resource goals and guidelines.

Entrance and Interpretive Center Zone: Facility improvements will be focused along the State Highway 1 corridor where current visitor use is located. Improvements in the main park entrance and visitor center area of the park will consist of improvements to circulation and parking to reduce congestion and those necessary for visitor safety. This alternative will continue serving the predominant existing coastal visitor use pattern and moderately expand visitor opportunities to inland areas of the park. Sensitive resource protection will be a priority and interpretation of the natural and cultural resources would support this goal. Resource protection in this zone would be improved as a result of fewer park facilities proposals.

Wildlife and Dune Protection Zone: Proposals and resource protection are the same as the Preferred Plan.

Cascade Ranch Zone: The only new park development will be the multi-use connection trail between Cascade Ranch and Lake Elizabeth. There will not be any new developments south of the Ranch complex. Adaptive use of historic structures for park staff housing will continue and appropriate alternative adaptive uses could be considered. Resource protection in this zone would be improved as a result of fewer park facilities proposals.

Lake Elizabeth Zone: The proposed Lake Elizabeth access, parking, and trailhead facility is the primary access and development proposal for the inland portions of the park. This will be primary inland vehicular access-trailhead. Other smaller trailhead access facilities will be located in the Cascade Ranch and Backcountry Planning Zones. Recreation opportunities consist of trail access, day use activities, and enroute camping. Resource protection is the same as the Preferred Plan.

Quiroste Valley Zone: This planning zone will remain as a remote undeveloped backcountry area without the Cultural Preserve sub-classification called for in the Preferred Plan. Appropriate additional trails and trailside camping opportunities will be considered. Cultural resource protection will be provided by proposed parkwide cultural resource goals and guidelines.

*Backcountry Zone:* Proposals and resource protection are the same as the Preferred Plan.

#### **Evaluation**

This alternative was considered in order to keep visitor facilities and development close to State Highway 1 corridor in order to reduce potential negative impacts in the park's most sensitive habitats and wild and remote character. Visitor access and park development improvements are focused along coastal areas and the State Highway 1 corridor to serve the current and continuing pattern of park visitor access and use. Visitor access and recreation opportunities for the inland areas of the park will only be established at Lake Elizabeth. This alternative would minimize development penetration into the more remote coastline and inland mountain areas. This alternative would also rely more on other regional Santa Cruz Mountains trailheads and recreation developments to help provide backcountry access and recreation opportunities.

This alternative would partially achieve the General Plan objectives for recreation and resource protection by improving visitor facilities along the coastal and State Highway 1 corridor areas. The focus on coastal development and limited amount of visitor access and facilities for the inland side of the highway and backcountry areas generally serves and continues the existing park visitor use patterns. It only expands access and visitor use in inland areas in a limited way. Minimum traffic and circulation improvements for safety along the highway corridor and visitor center area would be accomplished with this alternative. This alternative would avoid or minimize potential negative impacts to sensitive

resources inpart, by establishing the expanded coastal Natural Preserve and limiting access to the inland areas.

This alternative also supports additional opportunities to create a high quality visitor experience through new coastal trail connections to the California Coastal Trail as well as the existing Santa Cruz Mountains regional trail network. regional state parks, and natural areas, such as the Cloverdale Coastal Ranches, and to local or regional community destinations.

Protection for cultural resources in the Quiroste Valley would be provided by the General Plan's parkwide cultural resources goal and guidelines as well as the Department's cultural resource policies and directives.

This alternative would not provide multiple access locations and routes into the backcountry, and backcountry trail connections to regional natural lands and other nearby state parks would not occur. Current visitor use would become more concentrated on existing trails and in day use areas (picnicking, visitor center, and parking), due to a lack of facilities elsewhere in the park. This area of the park would require constant monitoring by park staff to ensure the desired level of resource protection. The quiet, remote quality of some coastal areas in this park may be replaced by frequent visitor and staff contact and intense visitor use and activity.

This alternative would reduce the number and variety of visitor facilities parkwide, and it would not adequately respond to the future recreation demand.

#### **ALTERNATIVE 3: NO PROJECT**

#### **Description**

The California Environmental Quality Act requires an evaluation of the "no project" alternative and its impact (CEQA Guidelines §15126.6[e][1]). The No Project Alternative represents perpetuation of existing management actions, and its analysis is based on the physical conditions that are likely to occur in the future if the project (the proposed General Plan) is not approved and implemented. The purpose of describing and analyzing the No Project Alternative is to allow decision-makers to compare the impacts of approving the proposed General Plan with the expected impacts of not approving the General Plan. Without a general plan for Año Nuevo SP, it is assumed that the existing patterns of operation and management would continue under this alternative and no

major recreational or operational facilities would be developed. Visitation increases would be somewhat smaller than under the Proposed Project due to less recreational opportunities and visitation capacity under this alternative. However, overall use would still be expected to increase as the state-wide and regional populations grow. The management actions that would protect, preserve, and restore natural and cultural resources beyond the requirements of laws and regulations would not occur under the No Project Alternative.

#### **Evaluation**

The existing conditions, lack of needed facilities, and limitations would continue if the General Plan were not adopted. Without the facility improvements to accommodate the existing visitor demand as well as a projected increase in visitor use, sensitive natural and cultural resources may be expected to degrade over time due to overuse, particularly in the popular coastal areas.

Under the "no project" alternative the park's natural and cultural resources may not receive an increased level of protection particularly with the proposed Natural Preserve in the coastal area. Resource management plans and policies for natural and cultural resources may not be developed. Under the "no project" alternative cultural resource protection would be limited. Development of a systematic assessment process to determine the future treatment of cultural resources within the park would be unlikely because implementation of new programs would require adoption of a general plan.

Demand for recreation facilities and programs are increasing along with population increases in the San Francisco Bay Area and Central Valley. However, without a general plan, the Department would not have the authority to develop or enhance facilities to respond to this demand, especially for day and overnight use, increased opportunities for access to the coast, and establishing formal access facilities for the inland areas. Recreational and interpretive improvements that could enhance the visitor experience at the park's current level of use or anticipated future needs would not be developed.

Under the "no project" alternative a comprehensive evaluation of park, regional, and statewide trail systems may not be accomplished. Opportunities would be missed to create a higher quality visitor experience through trail linkages to the California Coastal Trail, to regional state parks and

recreation and natural lands such as POST's Cloverdale Coastal Ranches property, and to local or regional community destinations or mass-transit stops.

Also under the "no project" alternative, land use management may not be evaluated on a parkwide basis, and the park's potential for planned and integrated land use, positive visitor experiences, recreational facility development, and possible future acquisitions may not occur. Without organized land use or management plans and development guidelines, incremental cumulative impacts may adversely impact the park in the future.

Traffic and circulation improvements may not be project" accomplished with the "no alternative. Improvements to traffic flow at the existing Entrance and Interpretive Center Zone may not be accomplished. Improvements to informational and directional signage may not occur. Improvements to existing day use coastal parking areas as well as trail connections along State Highway 1 may not be accomplished. As a result, highway traffic movement may be affected as projected park visitation increases. The existing visual and aesthetic character of the park may not be improved under the "no project" alternative, or enhanced in an important way, and existing scenic and other aesthetic resources may be affected.



Historic bridge on old Highway 1, Año Nuevo SNR

Table 5-1				
Planning Zone	Plan Altern Preferred Alternative	Alternative 1 – Moderate Facility Improvements and Increased Resource Protection	Alternative 2 – Disperse Visitor Access and Increase Resource Protection	
Entrance and Interpretive Center Zone	<ul> <li>Desired facilities and improvements:</li> <li>Provide visitor orientation and interpretation center</li> <li>Upgrade entrance and area parking</li> <li>Protect and rehabilitate the historic         Dickerman-Steele Ranch buildings and provide interpretive programs, staging areas, visitor services and day use facilities</li> <li>Continue provide employee residences</li> <li>Formalize Año Nuevo Bay access trail and southern Caltrans roadside parking area</li> <li>Establish viewpoint near the historic highway bridge and preserve coastal views</li> <li>Potential impacts from facility development and visitor use. Impacts will be minimized or avoided through the implementation of plan goals and guidelines ensuring protection of significant resources, appropriate facility location, and application of the adaptive management process.</li> </ul>	Same as the preferred plan.	Facility improvements same as the preferred plan except:  No improvements to southern Caltrans roadside parking area, Año Nuevo Bay access trail, and Año Nuevo Bay overlook  Less potential for impacts and improved resource protection due to fewer park facilities.	

Table 5-1 Plan Alternatives				
Planning Zone	Preferred Alternative	Alternative 1 – Moderate Facility Improvements and Increased Resource Protection	Alternative 2 – Disperse Visitor Access and Increase Resource Protection	
Wildlife and Dune Protection Zone	<ul> <li>Desired facilities and improvements:</li> <li>Establish a Natural Preserve sub-classification that will include the existing "Wildlife Protection Area"</li> <li>Provide greater resource protection</li> <li>Protect and restore sensitive habitats in the northern coastal dune complex</li> <li>Provide access on trails and trail connections between the Año Nuevo Point and Franklin Point areas</li> <li>Explore trail connections</li> <li>Establish 100 foot buffer area between Natural Preserve and State Highway 1</li> <li>Provide maritime interpretive programs</li> <li>Provide school group staging areas</li> <li>Coordinate with Caltrans State Highway 1 day use parking areas and trail connections</li> <li>Coordinate with the Dept. of Fish and Game improved access</li> <li>Coordinate with the Peninsula Open Space Trust trail and visitor facilities</li> <li>Maintain park boundary signage</li> <li>Accommodate research activities</li> <li>Potential impacts from facility development and visitor use. Impacts will be minimized or avoided through the implementation of plan goals and guidelines ensuring protection of significant resources, appropriate facility location, and application of the adaptive management process.</li> </ul>	Same as the preferred plan.	Facility improvements same as the preferred plan except:  No expansion of Gazos parking area  No shared development of inland trailhead and interpretive facilities with Cloverdale Coastal Ranches (at Gazos Creek Road).  Less potential for impacts than the preferred alternative due to fewer proposed visitor facilities (trailheads, trails, and expanded parking), no additional regional trail connections, and less potential visitor use. Improved resource protection due to fewer park facilities.	

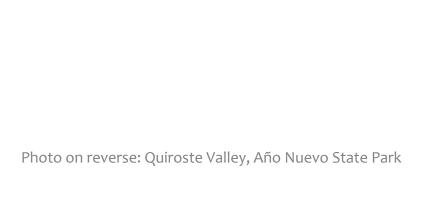
Table 5-1				
Plan Alternatives				
Planning Zone	Preferred Alternative	Alternative 1 – Moderate Facility	Alternative 2 – Disperse	
		Improvements and Increased	Visitor Access and Increase	
		Resource Protection	Resource Protection	
Cascade Ranch Zone	<ul> <li>Desired facilities and improvements:</li> <li>Retain historic character</li> <li>Initiate management plans</li> <li>Develop day use facilities</li> <li>Provide multi-use trail connection to Lake Elizabeth</li> <li>Consider either developing day use access facilities or establishing operations facilities south of ranch complex</li> <li>Potential impacts from facility development and visitor use. Impacts will be minimized or avoided through the implementation of plan goals and guidelines ensuring protection of significant resources, appropriate facility location, and</li> </ul>	<ul> <li>Facility improvements same as the preferred plan except:         <ul> <li>No new day use access facilities</li> <li>No new park operations facilities</li> <li>No new adaptive uses of Cascade Ranch buildings</li> </ul> </li> <li>Less potential for impacts than the preferred alternative due to fewer proposed visitor facilities (day use facilities) and less potential visitor use. Improved resource protection</li> </ul>	Facility improvements same as the preferred plan except:  No park operations facilities  No new adaptive uses of Cascade Ranch buildings  Less potential for impacts than the preferred alternative due to no proposed operations facilities resulting in improved resource	
Lake Elizabeth Zone	<ul> <li>application of the adaptive management process.</li> <li>Desired facilities and improvements:</li> <li>Develop day use areas</li> <li>Consider alternative day use parking</li> <li>Minimize visual impacts</li> <li>Provide multi-use trail connection to Cascade Ranch</li> <li>Potential impacts from facility development and visitor use. Impacts will be minimized or avoided through the implementation of plan goals and guidelines ensuring protection of significant resources, appropriate facility location, and application of the adaptive management process.</li> </ul>	due to fewer park facilities.  Same as the preferred plan.	protection due to fewer park facilities.  Same as the preferred plan.	



Table 5-1 Plan Alternatives				
Planning Zone	Preferred Alternative	Alternative 1 – Moderate Facility Improvements and Increased Resource Protection	Alternative 2 – Disperse Visitor Access and Increase Resource Protection	
Quiroste Valley Zone	<ul> <li>Desired facilities and improvements:</li> <li>Establish a Cultural Preserve</li> <li>Consult and pursue agreements with Native California Indian groups</li> <li>Provide visitor access to Native California Indian activities</li> <li>Limit signage</li> <li>Research village structures</li> <li>Allow Native California Indian activities</li> <li>Provide some new limited access road and trailhead parking</li> <li>Allow for appropriate trails</li> <li>Provide interpretive programs</li> <li>Potential impacts from facility development and visitor use. Impacts will be minimized or avoided through the implementation of plan goals and guidelines ensuring protection of significant resources, appropriate facility location, and application of the adaptive management process.</li> </ul>	Less development and visitor opportunities than the preferred plan:  No new access road improvements into the valley or trailhead parking  Less potential for impacts than the preferred alternative due to fewer proposed visitor facilities (trails and trailheads), no additional regional trail connections, and less potential visitor or special event use. Improved resource protection due to fewer park facilities.	Same development and visitor opportunities as the preferred plan, less emphasis on Quiroste culture:  No Cultural Preserve subclassification, cultural resource protection provided by parkwide goals and guidelines and Department policies.  Some increased potential for impacts as the preferred alternative due to lack of Cultural Preserve sub-classification protections and Quiroste cultural resource emphasis.	

Table 5-1 Plan Alternatives			
Planning Zone	Preferred Alternative	Alternative 1 – Moderate Facility Improvements and Increased Resource Protection	Alternative 2 – Disperse Visitor Access and Increase Resource Protection
Backcountry Zone	<ul> <li>Desired facilities and improvements:</li> <li>Provide trailhead access and parking</li> <li>Develop multi-use camps</li> <li>Coordinate with the Peninsula Open Space Trust trail and staging areas</li> <li>Interpretive shuttle tours of the backcountry</li> <li>Potential impacts from facility development and visitor use. Impacts will be minimized or avoided through the implementation of plan goals and guidelines ensuring protection of significant resources, appropriate facility location, and application of the adaptive management process.</li> </ul>	Less development and visitor opportunities than the preferred plan:  Less additional trail camps; trailheads and multi-use trails to regional trails;  No interpretive shuttle tours of backcountry  Less potential for impacts than the preferred alternative due to fewer proposed visitor facilities (trails and trailheads), no additional regional trail connections, and less potential visitor or special event use. Improved resource protection due to fewer park facilities.	Same as the preferred plan.





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### APPENDICES

#### **APPENDIX LISTING**

- A Location of EIR-Required Content in the General Plan/EIR
- B Publicly-Owned Recreational Facilities in the Vicinity of Año Nuevo State Park
- C Privately-Owned Recreational Facilities in the Vicinity of Año Nuevo State Park
- D Existing Trails
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- H Sensitive Wildlife Species That Occur or for which Potential Habitat Exists Within Año Nuevo State Natural Reserve
- I Sensitive Plant Species for which Suitable Habitat Exists within Año Nuevo State Park
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### APPENDIX A Location of EIR-Required Content in the General Plan/EIR

CEQA Guidelines Content	Location in General Plan/EIR
Section 15122. Table of Contents or Index	Table of Contents
Section 15123. Summary	Executive Summary
Section 15124. Project Description	Ch. 4 Park Plan (description) Sec. 5.3 Project Description (summarized) Ch. 1 Introduction (information about project objective and general plan process)
Section 15125. Environmental Setting	Ch. 2 Existing Conditions Sec. 5.4 Environmental Setting
Section 15126. Consideration and Discussion of Environmental Impacts	Ch. 5 Environmental Analysis
(a) (and Section 15126.2) Significant Environmental Effects of the Proposed Project	Sec. 5.6 Environmental Impacts and Mitigation
(b) Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented	Sec. 5.7 Other CEQA Considerations, Unavoidable Significant Environmental Effects
(c) Significant Irreversible Environmental Changes Which Would be Involved in the Proposed Project Should it be Implemented	Sec. 5.7 Other CEQA Considerations, Unavoidable Significant Environmental Effects
(d) Growth-Inducing Impact of the Proposed Project	Sec. 5.7 Other CEQA Considerations, Growth-Inducing Impacts
(e) (and Section 15126.4) The Mitigation Measures Proposed to Minimize the Significant Effects	Ch. 4 The Park Plan, Goals and Guidelines (intended to minimize adverse environmental effects) Sec. 5.6 Environmental Impacts and Mitigation
(f) Alternatives to the Proposed Project	Sec. 5.10 Alternatives to the Proposed Project
Section 15127. Limitations on Discussion of Environmental Impact	Sec. 5.7 Other CEQA Considerations, Significant Irreversible Environmental Changes
Section 15128. Effects Not Found to be Significant	Sec. 5.5 Environmental Effects Eliminated from Further Analysis
Section 15129. Organizations and Persons Consulted	Ch. 6 References
Section 15130. Discussion of Cumulative Impacts	Sec. 5.7 Other CEQA Considerations, Cumulative Impacts
Section 15131. Economic and Social Effects (optional topic)	Ch. 4 Park Plan Throughout the document under discussions of recreation and visitor experience

APPENDIX B
Publicly-Owned Recreational Facilities in the Vicinity of Año Nuevo State Park and State Natural Reserve

NAME OF		PICNIC			
FACILITY	CAMPSITES	SITES	TRAILS	OTHER(S)	COMMENTS
			STATE PARK	<b>(S</b>	
Butano SP	20 drive-in; 18 walk-in; also 8 backpacking sites at trail camp	12 picnic tables	~ 17 miles of designated hiking trail. Biking, horseback riding on unpaved roads only		Guided nature walks and weekend campfire programs offered during the summer.
Big Basin Redwoods SP – Inland	233 campsites parkwide, in campgrounds trail and horse camps	135 picnic sites	64.2 miles trails for hiking. Biking, horseback riding on fire roads only		Guided nature walks and campfire programs offered year-round
Big Basin Redwoods SP - Rancho del Oso	Horse camp with 6 units	4 picnic sites at the horse camp.	~.5 mi. west end of Skyline –to-the-Sea trail; ~.5 mile Marsh Trail; ~.5 mi. connection to other park trails	Nature Center	
Pigeon Point Light Station SHP			0.5 mile section of California Coastal Trail	Hostel Facility: up to 50 persons can be accommodated in dorm rooms or private rooms.	Consists of four three-bedroom houses adapted for hostel use. Groups between 10 to 30 can be accommodated.
Portola SP	53 tent spaces: 1 for disabled, 9 tent/RV; 4 walk-in grp camps: 3 hold 50, 1 holds 25;	Group day use for 75; also 2 parking for 30 cars; 3	18 miles of trails for hiking only		

NAME OF FACILITY	CAMPSITES	PICNIC SITES	TRAILS	OTHER(S)	COMMENTS
	also 6 sites for backpackers	picnic areas with 20 sites			
Castle Rock SP	Primitive for backpackers only: 26 units	None	"32+" miles: hiking, riding trails	Rock climbing	The 6.5 miles of the Skyline-to-the-Sea trail closest to Castle Rock is in that park. Only one fire road open to bikes to access the trail camp.
H. Cowell RSP	110 campsites	Group picnic for 50-60; 15 family sites	20 miles: hiking, riding; bikes on paved or fire roads	Nature Center; nature trail	The Roaring Camp and Big Trees Railroad is in the park
	1	COU	NTY PARKS - San I	Mateo County	
Pescadero Creek	Primitive walk-in camps (18 sites in two groups)	None	46.8 miles with loops; for hikers & equestrians	Biking on designated service roads only; Important plant and wildlife resources	Trail connections to Sam McDonald, Memorial and Portola parks; also Hikers' Hut, a hostel run by the Sierra Club, with a capacity of 14 people
Memorial Park	156 campsites; 6 youth grp areas; 2 group camps (75 people each)	4 reservable picnic areas (350 people max.)	12.5 miles of hiking and interpretive trails	Campfire center	Emphasis on interpretation: walks, programs
Sam McDonald	3 youth group camps (300 capacity); also horse camp for individuals or groups (8 sites, 80 people max.)	None	6.7 miles for hikers, joggers, and equestrians	Biking on designated service roads only	Trail connections to Memorial and Pescadero Creek parks; park has volunteer program
Heritage Grove	None	None	1.5 miles	Largest redwood trees in the Santa Cruz Mts.	Used for access to Pescadero Creek Park and the Hikers' Hut.

NAME OF FACILITY	CAMPSITES	PICNIC SITES	TRAILS	OTHER(S)	COMMENTS				
	COUNTY PARKS - Santa Cruz County								
Ben Lomond Park	None	12 picnic sites	No trails; street parking only	1-acre neighborhood park	Basketball court, playground; historic dam				
Felton Covered Bridge	None	6 picnic sites	~1/4 mile trail around park	32 parking spaces	Covered bridge; recreational amenities include a volleyball court, playgrounds, lawn, fishing				
Highlands Park	None	2 reservable group sites; ~12 family picnic sites	~1/2-mile trails	26 acres	Reservable house, sports field				
Quail Hollow Ranch	None	10 picnic sites	3.5 - 4 miles of trails	Gravel lot accommodating 50 cars	Emphasis on interpretation of natural resources; docent-led walks, nature programs available (also has historic ranch house, pond - no fishing), weddings				
		COUI	NTY PARKS - Santa	Clara County					
Sanborn County Park	13 RV sites plus 1 for disabled persons; 1 youth group camp for 35-40; 1 walk-in campground with 33 sites	3 reservable grp areas: 2 hold 100; 1 holds 200; 3 other areas first come first served for up to 420 (42	15 miles of hiking & horse trails; 1-mile nature trail; 267 parking spaces plus 10 for disabled persons	Lake for fishing	Emphasis on nature study, interpretation, ranger-led walks. Is adjacent to Castle Rock State Park, and has connecting trails				

NAME OF FACILITY	CAMPSITES	PICNIC SITES	TRAILS	OTHER(S)	COMMENTS
		sites x 10 each)			
Upper Stevens Creek	None	None	~8 miles of trails for hiking, mt. biking, and horse-back riding; only 5 parking spaces	"Wilderness" experience	
Stevens Creek	None	3 group picnic areas, capacity: 100, 75, and 50 people; also family sites, first come first served, total capacity of 800; 363 parking spaces	~8 miles of trails for hiking, mt. biking, and horseback riding (on specific trails)	Small lake – boating, fishing – no motorized craft	Archery, birding. Adjacent to Midpeninsula Open Space preserve (Fremont-Older)
	1	M	IDPENINSULA OPE	N SPACE	
Russian Ridge Open Space Preserve			8 mi. trails	Open grasslands, wildflowers, wildlife (raptors); views	Connections to: Bay Area Ridge Trail to Skyline Ridge OSP
Coal Creek Open Space Preserve			5 mi. trails; hiking, biking, equestrian	Forested areas, seasonal waterfalls	Connections to Skyline Blvd., Russian Ridge, and Portola Valley. Trail loops.
Los Trancos Open Space Preserve			5 mi. trails; no bicycles; 1.5-mi San Andreas Fault Trail	Grasslands, brushlands, forested areas; views	Self-guided geology interpretation along the Fault Trail

NAME OF FACILITY	CAMPSITES	PICNIC SITES	TRAILS	OTHER(S)	COMMENTS
Skyline Ridge Open Space Preserve		Several tables at Horseshoe Lake overlook	10 mi. trails; ~2 mi. of accessible trails; 3 mi. of Bay Ridge Trail	Meadows; pond with pier for nature study; lakes; chaparral; ridgetop views	Nature center offers docent-led tours
Monte Bello Ridge Open Space Preserve	Backpack walk-in camp; 4 single sites and 1 group site		~15 mi. trail system for hikers, bikers. Stevens Creek Nature Trail is a self-guided 3-mile loop	Grasslands, creekside forests; vistas; rich wildlife area	The 72-year-old Picchetti Ranch Area is in the southwestern corner of the preserve and features a working winery complex.
Long Ridge Open Space Preserve			10 mi. trails	Grasslands and oak, madrone and Douglas fir forests; great views.	Many connections, possibilities for trail loops. Connects to Skyline Ridge and Saratoga Gap preserves and Upper Stevens Creek County Park; also access from Highway 35 and 3-mile segment of Bay Area Ridge Trail; hiking trail to Portola SP
Saratoga Gap Open Space Preserve			Less than 2 miles of trail; ~1 mile paralleling Skyline Blvd.	Largely Douglas fir forest	Many trail connections: Sanborn-Skyline Park, Castle Rock SP, Big Basin Redwoods SP, Upper Stevens Cr. Park, Monte Bello Open Space Preserve, Saratoga Gap-Page Mill Rd. trail, Bay Area Ridge Trail; 9-mi. loop through Long Ridge
Fremont Older Open Space Preserve			~9 mi. hiking, biking, and equestrian trails	Open grasslands, brushy hillsides; historic house; vistas	
El Sereno Open Space Preserve			5.6 mi. hiking, biking & equestrian trails	Chaparral	

#### APPENDIX C

### Privately-Owned Recreational Facilities in the Vicinity of Año Nuevo State Park and State Natural Reserve

GROUP/ ORGANIZATION	ADDRESS	TYPE OF FACILITY
	Environmental education	
Sempervirens Outdoor School	20161 Big Basin Hwy. Boulder Creek, CA 95066	Environmental education for Bay Area Sixth Graders
Campgrounds available	to the general public	
Costanoa	2001 Rossi Rd. Pescadero, CA 94060	Resort & Campground
Cotillion Gardens RV Park	300 Old Big Trees Rd. Felton CA 95018	Campground
Redwood Resort	150 East Grove, Boulder Creek, CA 95006	Campground
River Grove Park	4980 Highway 9 Felton, CA 95018	Campground
Smithwoods RV Park	4770 Highway 9 Felton, CA 95018 Or: PO Box 27 Felton, CA 95018	Campground
Private campgrounds		
Boulder Creek Scout Reservation	250 Scout Ranch Road (formerly 14586 Bear Creek Rd.) Boulder Creek, CA 95006	Boy Scout Camp
Camp Butano Creek	1400 Canyon Rd. Pescadero, CA 94060	Girl Scout Camp
Camp Chesebrou	25005 Highway 9 Boulder Creek, CA 95006-9078	Boy Scout Camp
Camp Krem	Boulder Creek, CA	Camp for developmentally disabled
Cutter Scout Reservation	2500 China Grade Boulder Creek, CA 95006	Boy Scout Camp
Little Basin (Hewlett- Packard facility)	21700 Little Basin Rd. Boulder Creek, CA 95006	Former campground and recreation facilities for Hewlett-Packard employees, currently not in use
Red White and Blue Beach	5021 Coast Road	Campground, day use, beach
YMCA Camp Jones Gulch	Santa Cruz, CA 95060 11000 Pescadero Rd. La Honda, CA 94020	access (currently closed) YMCA Camp/Lodging
YMCA of the East Bay Camping	990 Pescadero Creek Rd. Loma Mar, CA	YMCA Camp/Lodging

GROUP/ ORGANIZATION	ADDRESS	TYPE OF FACILITY
YMCA of the Redwoods,	16275 Hwy. 9	YMCA Camp/Lodging
Camp Campbell	Boulder Creek, CA 95006-9652	
Retreats/lodging		
Camp Hammer	21401 Big Basin Hwy. Boulder Creek, CA 95066-9097	Group Retreats/lodging (Twin Lakes Church owns; open for Christian groups)
Camp Harmond	16403 Hwy. 9 Boulder Creek, CA 95006	Retreats/Lodging
Mission Springs Conference Center	1050 Lockhart Gulch Rd. Scotts Valley CA 95066	Retreats/Lodging
Mount Hermon Christian Conference Center	PO Box 413 Mount Hermon CA 95041	Retreats/Lodging
Mount Cross Lutheran Camp	PO Box 387 Felton, CA 95018	Retreats/Lodging
Quaker Center	PO Box 686, Ben Lomond CA 95005	Retreats/Lodging
Redwood Christian Park	15000 Two Bar Rd. Boulder Creek, CA 95006	Retreats/Lodging
Redwood Glen Camp and Conference Center	3100 Bean Creek Rd. Scotts Valley, CA 95066	Retreats/Lodging (Salvation Army; open to public; no alcohol) 205 acres; 300 people sleeping
Taungpulu Monastery	18335 Big Basin Hwy. Boulder Creek, CA 95006	Retreat/Lodging
Vajrapani Institute	19950 Kings Creek Rd. Boulder Creek, CA 95006 or PO Box 213 Boulder Creek, CA 95006	Retreats/Lodging
Overnight accommodat	ions	
Boulder Creek Lodge and Conference Center	16901 Big Basin Hwy. Boulder Creek, CA 95006	Lodge and Conference Center
Pigeon Point Lighthouse Hostel	210 Pigeon Point Rd. (@ Hwy 1) Pescadero, CA 94060-9713	Hostel operated by Hosteling-International
Costanoa	2001 Rossi Rd. Pescadero, CA 94060	Lodge, cabins
Best Western Inn	6020 Scotts Valley Drive Scotts Valley, CA 95066	Motel
Davenport Bed and Breakfast Inn	31 Davenport Avenue Davenport, CA 95017	Bed and Breakfast
Econo Lodge	9733 Highway 9 Ben Lomond, CA 95005-9204	Motel
Fairview Manor Bed and Breakfast Inn	245 Fairview Avenue Ben Lomond, CA 95005	Bed and Breakfast
Felton Crest Inn	780 El Solyo Heights Drive Felton, CA 95018	Bed and Breakfast

GROUP/ ORGANIZATION	ADDRESS	TYPE OF FACILITY
Fern River Resort Motel	5250 Highway 9 Felton, CA 95018	Motel
The Hilton Santa Cruz/Scotts Valley	6001 La Madrona Drive Scotts Valley, CA 95060	Hotel
Jaye's Timberlane Resort	8705 Highway 9 Ben Lomond, CA 95005	Motel
Merrybrook Lodge	13420 Big Basin Way Boulder Creek, CA 95006	Motel
Pescadero Creek Inn Bed and Breakfast	393 Stage Road Pescadero, CA 94060	Bed and Breakfast
Valley View Inn	600 Hacienda Scotts Valley, CA 95066	Bed and Breakfast

<sup>\*</sup>Additional privately–owned overnight accommodations, recreation facilities, and conference facilities are located in Santa Cruz

Preliminary Gen	eral	Plan	and	Draft	EIR
March 2008					

Año Nuevo State Park and State Natural Reserve

# APPENDIX D Existing Trails

#### Año Nuevo State Park, Año Nuevo State Natural Reserve, Butano State Park, and Big Basin Redwoods State Park

TRAIL # (as noted on Fig. 4)	NAME	TYPE OF USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
1	Skyline to the Sea	Hiking	14.4	24	1914
		Equestrian	7.2		
2	East Ridge Trail	Equestrian, Hiking	4.6	2	Unknown
3	Eagle Rock Trail	Hiking	1.0	0	1985
4	Shadowbrook Trail	Hiking	2.8	5	Unknown
5	Sequoia Trail	Hiking	2.9	2	1875
6	Pine Mountain Trail	Hiking	1.8	0	1932
7	Basin Trail	Hiking	3.2	0	Unknown
8	Hollow Tree Trail	Hiking	3.2	3	1977
9	Meteor Trail	Hiking	1.0	0	Unknown
10	Creeping Forest Trail	Hiking	1.3	0	Unknown
11	Dool Trail	Hiking	0.8	1	Unknown
12*	Redwood Trail	Hiking, Interpretive	0.6	0	1938
13	Blooms Creek Trail	Hiking	0.6	1	Unknown
14	Sunset Trail	Hiking	4.9	6	1914
15	Howard King Trail	Hiking	4.7	0	1972
16	Timms Creek Trail	Hiking	0.9	0	1914
17	McCrary Ridge Trail	Equestrian, Hiking	2.6	0	Unknown
18	Berry Creek Falls Trail	Hiking	1.1	1	1914

Appendix D: Existing Trails

TRAIL # (as noted on Fig. 4)	NAME	TYPE OF USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
19	Henry Creek Trail	Equestrian, Hiking	2.0	0	1964
20	Westridge Trail	Equestrian, Hiking	4.1	0	Unknown
21	Clark Connection	Equestrian, Hiking	1.1	0	Unknown
22	Marsh Trail	Equestrian, Hiking	0.4	0	Unknown
23	Nature Trail	Equestrian, Hiking	0.8	0	Unknown
24	Whitehouse Ridge Trail	Equestrian, Hiking	0.6	0	Unknown
25**	Conn. Sempervirens Campground- Blooms Ck. Campground	Hiking	0.2	0	Unknown
26**	Conn. Blooms Ck. Campground-Park HQ	Hiking	0.4	0	Unknown
27**	Conn. Hihn Hammond-Skyline to the Sea	Hiking	0.4	0	Unknown
28**	Conn. Sunset- Skyline to the Sea	Hiking	0.2	0	Unknown
29**	Conn. Eastridge- Shadowbrook (Hwy. 236)	Hiking	0.2	0	Unknown
30**	Conn. Eastridge- Shadowbrook (Huckleberry)	Hiking	0.4	0	Unknown

TRAIL#	NAME	TYPE OF USE	LENGTH IN PARK	# BRIDGES	YEAR
(as noted	INAIVIL	TIPE OF USE	(MILES)	# DRIDGES	CONSTRUCTED
on Fig. 4)			(IVIILLO)		CONOTROCTED
31**	Conn. Sequoia-	Hiking	0.1	0	Unknown
0.	Shadowbrook	g	011		
32**	Conn.	Hiking	0.3	0	Unknown
	Shadowbrook-	3		_	
	Wastahi				
	Campground				
33**	Conn.	Hiking	0.1	0	Unknown
	Shadowbrook-				
	Huckleberry				
	Campground				
34**	Conn. Sequoia	Hiking	0.4	0	Unknown
	Campground-Park				
	HQ			_	
35**	Sempervirens Falls	Hiking	0.1	0	Unknown
	Trail		4.0		
36	Ray Linder Trail	Hiking	1.0	0	Unknown
37	Indian Trail	Hiking	0.9	0	Unknown
38	Canyon Trail	Hiking	2.8	0	Unknown
39	Doe Ridge Trail	Hiking	1.6	0	Unknown
40	Jackson Flats Trail	Hiking	2.8	0	Unknown
41	Butano Creek Trail	Hiking	1.5	0	Unknown
42	Goat Hill Trail	Hiking	1.8	0	Unknown
43	Gazos Trail	Hiking	0.8	0	Unknown
44	Mill Ox Trail	Hiking	0.5	0	Unknown
45	Six Bridges Trail	Hiking	1.0	0	Unknown
46	Año Nuevo Trail	Hiking	1.3	0	Unknown
47	Whitehouse Ridge Trail	Hiking	1.5	0	Unknown
48	New Years Creek Trail	Hiking	0.25	0	Unknown
49	Cove Beach Trail	Hiking	0.04	0	Unknown
50	Pond Loop Trail	Hiking	0.4	0	Unknown

Appendix D: Existing Trails

TRAIL # (as noted on Fig. 4)	NAME	TYPE OF USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
51	Año Nuevo Point Trail	Hiking	1.3	0	Unknown
52	Cascade Creek Trail	Hiking	0.5	0	Unknown
53	Whitehouse Creek Trail	Hiking	0.19	0	Unknown
54	Atkinson Bluff Trail	Hiking	1.8	0	Unknown
55	Franklin Point Trail	Hiking	0.6	0	Unknown
56	Unmaintained Trails	Hiking	1.8	0	Unknown
57	Candelabra Trail	Hiking	1.5	0	Unknown

<sup>\*</sup> ADA accessible trail

Total Single-track Hiking Only 72.38
Total Single-track Equestrian and Hiking 23.4

TOTAL SINGLE-TRACK TRAIL 95.78 miles

<sup>\*\*</sup> Trail/Connector not located/numbered on Existing Roads and Trails Map

# APPENDIX E Existing Roads

#### Año Nuevo State Park, Año Nuevo State Natural Reserve, Butano State Park, and Big Basin Redwoods State Park

ROAD # (as noted on Fig. 4)	NAME	DESCRIPTION	TYPE OF USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
1	China Grade Road	Road-Paved	Public Road	3.7	0	1880
2	Rogers Road	Road- Paved/Unpaved	Public Road	0.6	0	1880
3	Lodge Road	Road-Paved	Public Road	1.8	0	1903
4	East Ridge Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	1.4	0	Unknown
5	Sky Meadow Road	Road-Paved	Public Road	3.8	0	
6	Little Basin Road	Road-Paved	Public Road, Authorized Vehicles	0.6	0	Unknown
7	Pine Mountain Road		Authorized Vehicles, Hiking, Mt. Biking, Equestrian	1.1	1	1960
8	North Escape Road	Road-Paved	Public Road	3.1	1	1895
9	Gazos Creek Road	Road- Paved/Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	5.3	0	1934

Appendix E: Existing Roads

ROAD # (as noted on Fig. 4)	NAME	DESCRIPTION	TYPE OF USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
10	Middle Ridge Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	3.8	0	1905
11	Johansen Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	1.8	0	Unknown
12	Hihn Hammond Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	2.5	1	1940
13	Last Chance Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	2.2	0	1970
14	Anderson Landing Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	0.9	0	Unknown
15	Whitehouse Canyon Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	2.4	0	Unknown

E-2 Appendix E: Existing Roads

ROAD # (as noted on Fig. 4)	NAME	DESCRIPTION	TYPE OF USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
16	Chalks Mountain Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	3.1	0	Unknown
17	East Waddell Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	5.1	0	1945
18	Upper Canyon Road	Road-Paved	Public Road	0.5	0	1940
19	Lower Canyon Road	Road-Paved	Public Road	0.3	0	1947
20*	Sky Meadow Campground Road	Road-Paved	Public Road	0.2	0	Unknown
21*	Huckleberry Campground Road	Road-Paved	Public Road	1.0	0	1968
22*	Sempervirens Campground Road	Road-Paved	Public Road	0.3	0	1949
23*	Blooms Creek Campground Road	Road-Paved	Public Road	0.4	1	1930
24*	Alder Campground Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	0.1	0	1945
25	Highway 236	Road-Paved	Public Road	6.5	0	1929-1938
26	Highway 1	Road-Paved	Public Road	1.2	1	Unknown
27*	Union Creek Road	Road-Unpaved	Public Road	0.2	0	1974

Appendix E: Existing Roads

ROAD # (as noted on Fig. 4)	NAME	DESCRIPTION	TYPE OF USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
28	Butano Fire Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	5.2	6	Unknown
29	Olmo Fire Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	3.2	7	Unknown
30	Butano SP Entrance Road	Road-Paved	Public Road	1.0	1	Unknown
31	Gazos Creek Road	Road-Paved	Public Road	3.6	8	Unknown
32	Old Womans Creek Road	Road-Unpaved	Public Road	1.6	5	Unknown
33	Whitehouse Canyon Road	Road-Unpaved	Public Road	1.4	4	Unknown
34	Chalk Mountain Fire Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	0.78	3	Unknown
35	Año Nuevo SNR Entrance Road	Road-Paved	Public Road	0.4	1	Unknown
36	Año Nuevo SNR Service Road	Road-Paved	Authorized vehicles	0.5	2	Unknown

<sup>\*</sup> Road not located/numbered on Existing Roads and Trails Map

E-4 Appendix E: Existing Roads

#### **A**PPENDIX **F**

### **Soil Types**

#### Año Nuevo State Natural Reserve

Soil Series	Soil type/ Parent Material	Depth and Drainage	Runoff	Permeability	Erosion Hazard	Shrink Swell
Dublin Clay	Clay to clay loam	Moderately deep	Slow	Slow	None to slight	High
	Alluvium from sedimentary rocks	Well to poorly drained				
Lockwood	Shaly loam to clay loam	Very deep, well drained	Low to high	Moderately slow	slight to moderate	Moderate
(Brown subsoil variant)	Siliceous shale parent					
Lobitos	Fine sandy loam – clay loam	Moderately deep, well drained	Slow to medium	Moderately rapid to rapid	Slight to moderate	Moderate
	Sandstone and Shale parent					
Watsonville	Loam to sandy loam	Deep, Poorly	Slow to rapid	Very slow	None to slight	High
a.co	Alluvium from sedimentary rocks	drained (perched water table)				

Source: USDA 1961, 1973, and 2002

# Soil Types Año Nuevo State Park

Soil Series	Soil type/ Parent Material	Depth and Drainage	Runoff	Permeability	Erosion Hazard	Shrink Swell
Botella	Silty clay loam Alluvium form sedimentary parent	Very deep, well drained	Low to high	Moderately slow	Slight to moderate	Moderate
Butano	Silt loam Siliceous shales	Moderately deep Well drained	Rapid to moderate	Moderate	Moderate to high	Moderate
Colma	Loam to sandy loam Unconsolidated marine sedimets	Deep, well drained	Medium to very rapid	Moderately slow to slow	Slight to high	Low
Corralitos	Sandy loam Sandy alluvium from sedimentary rocks	Deep, excessively drained	Slow	Rapid	Slight	Low
Dublin Clay	Clay to clay loam Alluvium from sedimentary rocks	Moderately deep Well to poorly drained	Slow	Slow	None to slight	High
Gazos	sandy loam to loam Sandstone & Shale	Moderately deep, well drained	High to very high	Moderately slow	Slight to high	Moderate
Lobitos	Fine sandy loam – clay loam Sandstone and Shale parent	Moderately deep, well drained	Slow to medium	Moderately rapid to rapid	Slight to moderate	Moderate
Lockwood (Brown subsoil variant)	Shaly loam to clay loam Siliceous shale parent	Very deep, well drained	Low to high	Moderately slow	slight to moderate	Moderate

Pomponio	Loam to clay loam Shale	Shallow to moderately deep, moderately well drained	Medium	Moderate to slow	High	High
Santa Lucia	Shaley clay loam Shale	Moderately deep, well drained	Very low to high	Moderate	Slight to high	Low
Tierra	Loam Alluvium form sedimentary rocks	Deep, moderately well drained	Slow to rapid	Very slow	Moderate to very high	High
Tunitas	Loam Fine grained alluvium	Very deep, moderately well drained	Slow to medium	Slow	Slight to moderate	High
Watsonville	Loam to sandy loam Alluvium from sedimentary rocks	Deep, Poorly drained (perched water table)	Slow to rapid	Very slow	None to slight	High

Source: USDA 1961, 1973, and 2002

Appendix F: Soil Types F-3

### Appendix G

#### Sensitive Plant Species for Which Suitable Habitat Exists Within Año Nuevo State Natural Reserve

SPECIES	COMMON NAME	STATUS*	PROBABILITY IN AŇO NUEVO SNR
Abronia umbellata ssp. umbellata	Pink sand-verbena	SLC	Possible
Agrostis blasdalei	Blasdale's bent grass	CNPS List 1B	Possible
Amsinckia lunaris	bent-flowered fiddleneck	CNPS List 1B	Possible
Arabis blepharophylla	coast rock cress	CNPS List 4, SLC	Possible
Astragalus nuttallii var. nuttallii	Nuttall's milk-vetch	CNPS List 4	Possible
Astragalus pycnostachyus var. pycnostachyus	coastal marsh milk-vetch	CNPS List 1B, SLC	Possible
Atriplex californica	California saltbush	SLC	Possible
Castilleja exserta ssp. latifolia	purple owl's-clover	SLC	Possible
Chorizanthe cuspidata var. cuspidata	San Francisco Bay spineflower	CNPS List 1B	Possible
Cirsium andrewsii	Franciscan thistle	CNPS List 1B	Possible
Corethrogyne leucophylla	branching beach aster	CNPS List 3	Possible
Erodium macrophyllum	round-leaved filaree	CNPS List 2	Possible
Erysimum ammophilum	coast wallflower	CNPS List 1B	Present
Erysimum franciscanum	San Francisco wallflower	CNPS List 4	Possible
Fritillaria agrestis	stinkbells	CNPS List 4	Possible
Grindelia hirsutula var. maritima	San Francisco gumplant	CNPS List 1B	Possible
Horkelia cuneata ssp. sericea	Kellogg's horkelia	CNPS List 1B	Possible

Horkelia marinensis	Point Reyes horkelia	CNPS List 1B	Possible
Lasthenia macrantha ssp. macrantha	perennial goldfields	CNPS List 1B	Possible
Leptosiphon grandiflorus	large-flowered linanthus	CNPS List 4	Not Likely
Lotus formosissimus	harlequin lotus	CNPS List 4	Possible
Microseris paludosa	marsh microseris	CNPS List 1B	Not Likely
Monardella undulata	curly-leaved monardella	CNPS List 4	Possible
Perideridia gairdneri ssp. gairdneri	Gairdner's yampah	CNPS List 4	Possible
Piperia michaelii	Michael's rein orchid	CNPS List 4	Possible
Plagiobothrys chorisianus var. chorisianus	Choris's popcorn-flower	CNPS List 1B, SLC	Possible
Potentilla hickmanii	Hickman's cinquefoil	CNPS List 1B, SE, FE	Not Likely
Ranunculus lobbii	Lobb's aquatic buttercup	CNPS List 4	Possible
Stebbinoseris decipiens	Santa Cruz microseris	CNPS List 1B	Possible
Trifolium buckwestiorum	Santa Cruz clover	CNPS List 1B	Possible

<sup>\*</sup>Status Codes: SE = State Endangered; FE = Federal Endangered; CNPS List 1B = Plants rare, threatened, or endangered in California and elsewhere; CNPS List 2 = Plants rare, threatened, or endangered in California, but more common elsewhere; CNPS List 3: = Plants about which we need more information; CNPS List 4 = Plants of limited distribution, a watch list; SLC= USFWS Species of Local Concern.

APPENDIX H

Sensitive Wildlife Species That Occur, or For Which Potential Habitat Exists

Within Año Nuevo State Natural Reserve

TYPE	SPECIES	COMMON NAME	STATUS	PROBABILITY IN ANSNR
AMPHIBIANS	Rana aurora draytonii	California red-legged frog	FT, CSC, CP	Present
	Ambystoma tigrinum	Tiger Salamander	FT, CSC, CP	Unlikely
BIRDS	Gavia immer	Common Ioon	CSC	Present
	Pelecanus occidentalis californicus	California Brown pelican	FE, SE, CFP	Present
	Phalacrocorax auritus	*Double-crested cormorant	CSC	Present
	Ardea herodias	*Great blue heron	Local concern	Present
	Nycticorax nycticorax	*Black-crowned night heron	Local concern	Present-r
	Histrionicus histrionicus	Harlequin duck	FSC, CSC	Present-r
	Accipiter cooperi	Cooper's hawk	CSC	Present-r
	Accipiter striatus	Sharp-shinned hawk	CSC	Present
	Aguilla chrysaetos	Golden eagle	CSC, CFP	Present
	Circus cyaneus	Northern harrier	CSC	Present
	Elanus caeruleus	White-tailed kite	CFP	Present
	Falco columbarius	Merlin	CSC	Present-r
	Falco peregrinus anatum	American peregrine falcon	SE, CFP	Present
	Haliaeetus leucocephalus	Bald eagle	CE, FT (FPD),CFP CSC	Unlikely
	Pandion haliaetus	Osprey	FSC, ST, CFP	Present-r
	Laterallus jamaicensis coturniculus	California black rail	FT, CSC	Unlikely
	Charadrius alexandrinus nivosus	Western snowy plover	CSC	Present
	Numenius americanus	Long-billed curlew	CSC	Present
	Larus californicus	California gull	FE, SE, CFP	Present
	Sterna antillarum browni	California least tern	CSC	Unlikely
	Sterna elegans	Elegant tern	FT, SE, CFP	Present
	Brachyramphus marmoratus	Marbled murrelet	CSC	Present
	Cerorhinca monocerata	Rhinoceros auklet	CSC	Present
	Asio flammeus	Short-eared owl	CSC	Present-r
	Asio otus	Long-eared owl	CSC	Unlikely

	Cypseloides niger	Black swift	CSC	Present
	Chaetura vauxi	Vaux's swift	SE	Present
	Empidonax trailii	Willow flycatcher	FSC, CSC	Unlikely
	Lanius Iudovicianus	Loggerhead shrike	CSC	Present
	Progne subis	Purple martin	ST	Present-r
	Riparia riparia	Bank swallow	CSC	Present
	Dendroica petechia brewsteri	Yellow warbler	FSC, CSC	Present
	Geothlypis trichas sinuosa	Saltmarsh Common		Present?
		Yellowthroat	FSC, CSC	
	Agelaius tricolor	Tricolored blackbird		Present
MAMMALS	Corynorhinus townsendii townsendii	Townsend's western big-eared bat	WBWG, CSC	Potential
	Antrozous pallidus	Pallid bat	WBWG, CSC	Potential
	Myotis evotis	Long-eared myotis	FSC?	?
	Myotis thysanodes	Fringed myotis	WBWG	Potential
	Myotis volans	Long-legged myotis	WBWG	Potential
	Eumops perotis	Western mastiff bat	WBWG, CSC	Potential
	Bassiriscus astutus	Ringtail	CFP?	Potential
	Eumetopias jubatus	Stellar's (Northern) sea lion	FT	Present
REPTILES	Clemmys marmorata	Western pond turtle	FSC, CSC	Potential?
	Phrynosoma coronatum frontale	California horned lizard	FSC, CSC, CP	
	Thamnopsis sirtalis tetrataenia	San Francisco garter snake	FE, CE, CFP	Present
FISHES	Onchorynchus kisutch	Coho salmon – Central California coast ESU	FT, SE	Potential
	Onchorynchus mykiss	Steelhead – Central California coast ESU	FT	Present
	Eucyclogobius newberryi	Tidewater goby	FE (FPD), CSC	
INVERTEBRATES	Danaus plexippus	Monarch butterfly	Local concern	Present
	Speyeria adiaste adiaste	Unsilvered fritillary butterfly	FSC	
	Cicindela hirticollis gravida	Sandy beach tiger beetle	FSC	
	Tryonia imitator	California brackishwater snail	FSC	
		<u> </u>	<u>l</u>	

\*Status Codes: FE = Federal Endangered; FT = Federal Threatened; FC = Federal Candidate for listing; FPD = Federal Proposed for Delisting; FSC = Federal Species of Concern; SE = State Endangered; ST = State Threatened; CFP = California Fully Protected; CP = California Protected; CSC = California Species of Special Concern; MNBMC = Fish and Wildlife Service's Migratory Nongame Birds of Management Concern.

Information Sources: CNDDB, 2005; California State Parks Natural Resources Baseline Condition Assessment, FY 2001/02; Año Nuevo State Natural Reserve Website

# APPENDIX I Sensitive Plant Species for Which Suitable Habitat Exists Within Año Nuevo State Park

SPECIES	COMMON NAME	STATUS*	PROBABILITY IN AŇO NUEVO STATE PARK
Amsinkia lunaris	bent-flowered fiddleneck	CNPS List 1B, SLC	Possible
Arabis blepharophylla	coast rock cress	CNPS List 4, SLC	Possible
Arctostaphylos andersonii	Santa Cruz manzanita	CNPS List 1B	Possible
Arctostaphylos glutinosa	Schreiber's manzanita	CNPS List 1B	Not Likely
Calandrinia breweri	Brewer's calandrinia	CNPS List 4	Possible
Calochortus umbellatus	Oakland star-tulip	CNPS List 4	Not Likely
Cirsium andrewsii	Franciscan thistle	CNPS List 1B	Not Likely
Collinsia multicolor	San Francisco collinsia	CNPS List 1B	Possible
Corethrogyne filagnifolia (= C. leucophylla)	branching beach aster	CNPS List 3	Possible
Cypripedium fasciculatum	clustered lady's-slipper	CNPS List 4	Not Likely
Cypripedium montanum	mountain lady's-slipper	CNPS List 4	Not Likely
Elymus californicus	California bottle-brush grass	CNPS List 4	Possible
Erodium macrophyllum	round-leaved filaree	CNPS List 2	Possible
Erysimum franciscanum	San Francisco wallflower	CNPS List 4	Not Likely
Fritillaria agrestis	stinkbells	CNPS List 4, SLC	Not Likely
Leptosiphon grandiflorus	large-flowered linanthus	CNPS List 4	Not Likely
Lotus formosissimus	harlequin lotus	CNPS List 4	Possible
Microseris paludosa	marsh microseris	CNPS List 1B	Not Likely
Pedicularis dudleyi	Dudley's lousewort	CNPS List	Not Likely

		1B, SR	
Perideridia gairdneri ssp. gairdneri	Gairdner's yampah	CNPS List 4	Possible
Piperia michaelii	Michael's rein orchid	CNPS List 4	Possible
Plagiobothrys chorisianus var. chorisianus	Choris's popcorn-flower	CNPS List 1B, SLC	Likely
Plagiobothrys chorisianus var. hickmanii	Hickman's popcorn-flower	CNPS List 4	Possible
Plagiobothrys diffusus	San Francisco popcorn- flower	CNPS List 1B, SE	Present
Ranunculus lobbii	Lobb's aquatic buttercup	CNPS List 4	Possible
Sanicula hoffmannii	Hoffmann's sanicle	CNPS List 4	Not Likely
Silene verecunda ssp. verecunda	San Francisco campion	CNPS List 1B	Possible
Stebbinoseris decipiens	Santa Cruz microseris	CNPS List 1B	Possible
Trifolium buckwestiorum	Santa Cruz clover	CNPS List 1B	Possible
Zigadenus micranthus var. fontanus	marsh zigadenus	CNPS List 4	Possible

<sup>\*</sup>Status Codes: SE = State Endangered; FE = Federal Endangered; CNPS List 1B = Plants rare, threatened, or endangered in California and elsewhere; CNPS List 2 = Plants rare, threatened, or endangered in California, but more common elsewhere; CNPS List 3: = Plants about which we need more information; CNPS List 4 = Plants of limited distribution, a watch list; SLC= USFWS Species of Local Concern.

APPENDIX J
Sensitive Wildlife Species That Occur, or For Which Potential Habitat Exists
Within Año Nuevo State Park

TYPE	SPECIES	COMMON NAME	STATUS	PROBABILITY IN ANSP
AMPHIBIANS	Rana aurora draytonii	California red-legged frog	FT, CSC, CP	Present
	Ambystoma tigrinum	Tiger Salamander	FT, CSC, CP	Unlikely
BIRDS	Phalacrocorax auritus	*Double-crested cormorant	CSC	Present
	Ardea herodias	*Great blue heron	Local concern	Present
	Nycticorax nycticorax	*Black-crowned night heron	Local concern	Present-r
	Accipiter cooperi	Cooper's hawk	CSC	Present-r
	Accipiter striatus	Sharp-shinned hawk	CSC	Present
	Aquilla chrysaetos	Golden eagle	CSC, CFP	Present
	Circus cyaneus	Northern harrier	CSC	Present
	Elanus caeruleus	White-tailed kite	CFP	Present
	Falco columbarius	Merlin	CSC	Present-r
	Falco peregrinus anatum	American peregrine falcon	SE, CFP	Present
	Haliaeetus leucocephalus	Bald eagle	CE, FT (FPD),CFP CSC	Unlikely
	Pandion haliaetus	Osprey	FSC, ST, CFP	Present-r
	Laterallus jamaicensis coturniculus	California black rail	CSC	Unlikely
	Larus californicus	California gull	FT, SE, CFP	
	Brachyramphus marmoratus	Marbled murrelet	CSC	Potential
	Asio flammeus	Short-eared owl	CSC	Present
	Asio otus	Long-eared owl	csc	Present-r
	Cypseloides niger	Black swift	CSC	Unlikely
	Chaetura vauxi	Vaux's swift	SE	Present
	Empidonax trailii	Willow flycatcher	FSC, CSC	Present
	Lanius Iudovicianus	Loggerhead shrike	CSC	Unlikely
	Progne subis	Purple martin	ST	Present
	Riparia riparia	Bank swallow	CSC	Present-r
	Dendroica petechia brewsteri	Yellow warbler	FSC, CSC	Present
	Geothlypis trichas sinuosa	Saltmarsh Common	,	Present

	A malaina trianlar	Yellowthroat	FSC, CSC	Present?
	Agelaius tricolor	Tricolored blackbird		Present
MAMMALS	Corynorhinus townsendii townsendii	Townsend's western big-eared bat	WBWG, CSC	Potential
	Antrozous pallidus Myotis evotis Myotis thysanodes Myotis volans Eumops perotis Bassiriscus astutus Eumetopias jubatus	Pallid bat Long-eared myotis Fringed myotis Long-legged myotis Western mastiff bat Ringtail Stellar's (Northern) sea lion	WBWG, CSC FSC? WBWG WBWG WBWG, CSC CFP? FT	Potential ? Potential Potential Potential Potential Present
REPTILES	Clemmys marmorata Phrynosoma coronatum frontale Thamnopsis sirtalis tetrataenia	Western pond turtle California horned lizard San Francisco garter snake	FSC, CSC FSC, CSC, CP FE, CE, CFP	Present Potential? Present
FISHES	Onchorynchus kisutch Onchorynchus mykiss	Coho salmon – Central California coast ESU Steelhead – Central California	FT, SE FT	Present Present
	Eucyclogobius newberryi	coast ESU Tidewater goby	FE (FPD), CSC	?
INVERTEBRATES	Danaus plexippus Speyeria adiaste adiaste Tryonia imitator	Monarch butterfly Unsilvered fritillary butterfly California brackishwater snail	Local concern FSC FSC	Present

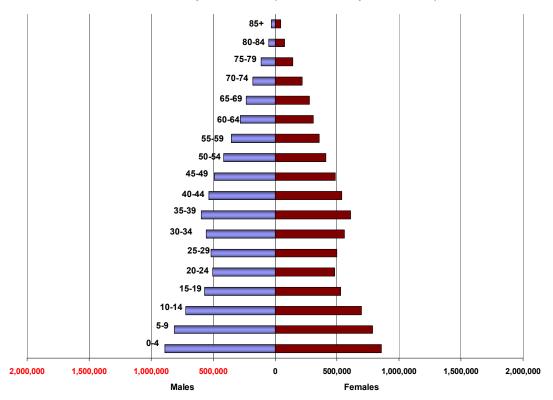
<sup>\*</sup>Status Codes: FE = Federal Endangered; FT = Federal Threatened; FC = Federal Candidate for listing; FPD = Federal Proposed for Delisting; FSC = Federal Species of Concern; SE = State Endangered; ST = State Threatened; CFP = California Fully Protected; CP = California Protected; CSC = California Species of Special Concern; MNBMC = Fish and Wildlife Service's Migratory Nongame Birds of Management Concern; WBWG = Western Bat Working Group High Priority Species. (r = very rare)

### **Information Sources:**

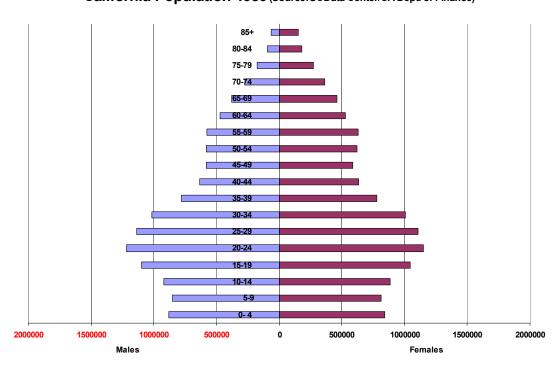
- -CNDDB, 2005
- -California State Parks Natural Resources Baseline Condition Assessment, FY 2001/02
- -The Birds of Año Nuevo State Natural Reserve Checklist Revised August 2003 (San Mateo Coast Natural History Association)
- -Terrestrial Mammals of Año Nuevo SNR List (DPR)

APPENDIX K
California Population 1960 - 2020

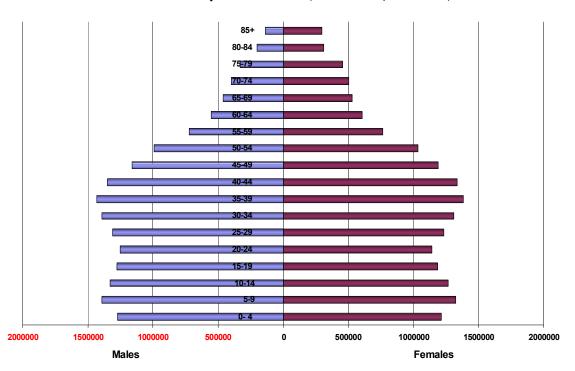
### California Population 1960 (Source: CA Dept. of Finance)



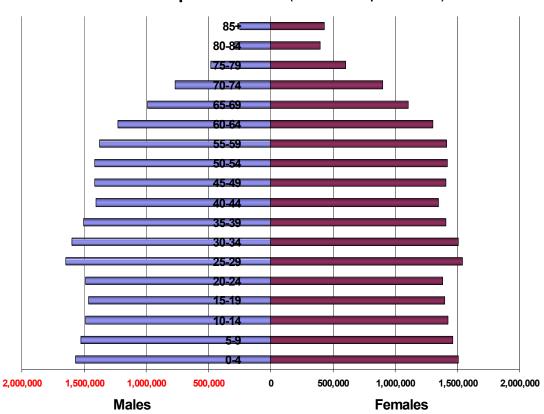
## California Population 1980 (Source: UCData Center/CA Dept. of Finance)



## California Population 2000 (Source: CA Dept. of Finance)



## California Population 2020 (Source: CA Dept. of Finance)



#### **APPENDIX L**

## **Acronyms and Abbreviations**

ABAG Association of Bay Area Governments

ADA Americans with Disabilities Act

AMBAG Association of Monterey Area Governments

ANGB Año Nuevo Groundwater Basin

BAAQMD Bay Area Air Quality Management District

bgs Below ground surface

BLM United States Bureau of Land Management

BMP Best Management Practice

Caltrans California Department of Transportation

CARB California Air Resources Board

CCNM California Coastal National Monument

CCRWQCB Central Coast Regional Water Quality Control Board CAL FIRE California Department of Forestry and Fire Protection

CDFG California Department of Fish and Game
CEQA California Environmental Quality Act
CNDDB California Natural Diversity Data Base

CNPS California Native Plant Society
CRHF Cascade Ranch Historic Farm
CRHP California Register of Historic Places

CSP California State Parks

CZMA Coastal Zone Management Act

DOM Department Operations Manual

DPR California Department of Parks and Recreation
DWR California Department of Water Resources

EIR Environmental Impact Report EPA Environmental Protection Agency

ESU Evolutionary Significant Unit

GGNRA Golden Gate National Recreation Area

LCP Local Coastal Program

MPA Marine Protected Area

MROSD Midpeninsula Open Space District

NMFS National Marine Fisheries Service

NOP Notice of Preparation

NRHP National Register of Historic Places

PCA Pescadero Conservation Alliance

POST Peninsula Open Space Trust PRC Public Resources Code

RWQCB Regional Water Quality Control Board

SB State Beach

SCMTD Santa Cruz Metropolitan Transit District

SFBAB San Francisco Bay Air Basin

SMCNHA San Mateo Coast Natural History Association

SP State Park

SNR State Natural Reserve

SWRCB State Water Resources Control Board

TPL The Trust for Public Land

USACOE
U.S. Army Corps of Engineers
USDA
U.S. Department of Agriculture
USFWS
U.S. Fish and Wildlife Service
USGS
U.S. Geological Survey

VCM Visitor Capacity Management

WAP Wildlife Action Plan

## APPENDIX M Glossary

- Access (Egress/Ingress) The ability to enter a site (ingress) from a roadway or trail and exit a site (egress) onto a roadway or trail by vehicle, walking, bike, horse, etc.
- Accessibility (for people with disabilities) Under the Americans with Disabilities Act of 1990, state and local governments that construct new buildings and facilities, or make specific alterations to existing buildings, facilities and programs, must make them accessible. Title II requires a public entity to ensure that persons with disabilities are not excluded from services, programs, and activities because existing building and facilities are inaccessible. Beyond Federal law, the state has established standards for accessibility in the California Building Code. Title I and Title III would also be applicable. See Americans with Disabilities Act of 1990.
- **Adaptive Use** Use of a historic structure for a purpose other than that for which it was originally intended. This may require alterations to a structure's interior while maintaining the original exterior appearance.
- **Alluvium** Sand, gravel, silt, and clay deposited by rivers and streams in valley bottoms.
- Americans with Disabilities Act of 1990 (ADA) Ensures equal access to all users of public (and private) facilities and programs. This federal civil rights legislation for persons with disabilities passed in 1990. The ADA covers a wide range of disabilities, from physical conditions affecting mobility, stamina, sight, hearing, and speech, to conditions such as emotional illness and learning disorders. The ADA also addresses access to the workplace. See Accessibility.
- Aquifer A layer of water-bearing permeable rock, sand, or gravel capable of providing significant amounts of water to wells or springs. The upper boundary of the topmost aquifer is known as the water table. Some areas have several aquifers, each capped on top by an impervious layer (aquitard). If the recharge area is elevated higher that the capping layer, the water may be under considerable pressure, and flowing or Artesian wells may be likely.
- **Buffer** An area or strip of land separating two distinct and/or incompatible land uses or zones, which acts to soften or mitigate the effects of one land use on another. It should function as a barrier for both vision and sound.
- California Environmental Quality Act (CEQA) The California Environmental Quality Act, Public Resources Code Section 21000 et. seq.; Title 14, California Code of Regulations Section 15000 et. seq. CEQA is a statute that requires state and local agencies to identify the significant

- environmental and historical impacts of their proposed actions and to avoid or mitigate any adverse impacts, if feasible.
- California State Park and Recreation Commission Established in 1927 to advise the Director of Parks and Recreation on the recreational needs of the people of California. The commissioners are appointed by the Governor and conduct public hearings on naming, classification and the approval of general plans (and amendments) for State Park System units.
- Clay A particle of sediment less than 1/256 of a millimeter in diameter. Also, a family of platy silicate minerals that commonly form as a product of weathering.
- Concessions A contract with persons, corporations, partnerships, or associations for the provision of products, facilities, programs and management and visitor services that will provide for the enhancement of park visitor use, enjoyment, safety, and convenience. Concessions may be for food service, overnight accommodation, equipment rentals (canoes, raft, skis), gift stores, etc.
- Cultural Landscape a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity or person or exhibiting other cultural or aesthetic values. There are four general types of cultural landscapes, not mutually exclusive: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes.
- **Direct Impacts** Primary environmental effects that are caused by a project and occur at the same time and place.
- **Environment** The California Legislature defined 'environment' to refer to "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, noise, objects of historic or aesthetic significance."
- **Environmental Analysis** The task of addressing the potential impact of any given plan or development project on the state's environment, an analysis that can range across any number of topics including air pollution, toxins, and impacts on plants, animals and historical resources.
- **Environmental Gradient** a gradual and continuous change in communities and environmental condition
- **Environmental Impact Report (EIR)** An informational document prepared by the lead agency responsible for carrying out a project as part of the CEQA public review process that describes and analyzes a project's potential significant environmental effects and discusses ways to mitigate or avoid

- those effects. See California Environmental Quality Act, Tiered Approach/Tiering.
- **Evolutionary Hotspot** A geographical area of rapid diversification of mammals. The rapid process of developing new species through evolutionary processes can generate and sustain biological diversity.
- **Evolutionary Significant Unit (ESU)** A population or group of populations of salmon that 1) is substantially reproductively isolated from other populations and 2) contributes substantially to the evolutionary legacy of the biological species. (This concept is used by National Marine Fisheries Service in its administration of the ESA for anadromous salmon populations.)
- Exotic Species (or alien, non-native or non-indigenous species) A species occurring in an area outside of its historically known natural range that has been intentionally introduced or has inadvertently penetrated the system. Also known as introduced, non-native, non-indigenous or ornamental species. See Non-native Species.
- General Plan A document providing broad public policy and programmatic guidance regarding development and management of an individual unit of the State Park System, essential to the managers, staff and stakeholders. A General Plan is sometimes called a "comprehensive plan" or "master plan." See Master Plan.
- Global Warming An increase in the near surface temperature of the Earth. Global warming has occurred in the distant past as the result of natural influences, but the term is most often used to refer to the warming predicted to occur as a result of increased emissions of greenhouses gases.
- **Gravel** All sedimentary particles (rock or mineral) larger than 2 millimeters and smaller than 64 millimeters in diameter.
- Greenhouse Gas Any gas that absorbs infra-red radiation in the atmosphere. Greenhouse gases include water vapor, carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), halogenated fluorocarbons (HCFCs), ozone (O3), perfluorinated carbons (PFCs), and hydrofluorocarbons (HFCs).
- **Guidelines** General statements of policy direction around which specific details may later be established.
- **Habitat** The physical location or type of environment in which an organism or biological population lives or occurs, often characterized by a dominant plant form or physical characteristic (e.g., the oak-savanna, wetland, or a coastal habitat).

Appendix M: Glossary M-3

- Historic Context An organizing framework for interpreting history that groups information about historical resources sharing a common theme, geographic area, or chronology. The development of 'historic context' is a foundation for decisions regarding the planning, identification, evaluation, registration, and treatment of historical resources based upon comparative historic significance.
- Historic District A geographic area that contains a concentration of historic buildings, structures, or sites united historically, culturally, or architecturally. Historic districts are defined by precise geographic boundaries.
- Historic Resource(s) Any object, building, structure, site, area, place, record, or manuscript which is historically significant or which is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, archaeological or cultural history of California.
- Holocene An epoch of the Quaternary Period, from the end of the Pleistocene, approximately 8,000 years ago to the present time.
- **Indirect Impacts** Also referred to as secondary effect, indirect impacts are caused by a project and occur later in time or at some distance from the project.
- **Interpretation** A mission-based communication process that forges emotional and intellectual connections between the interests of the audience and the meanings inherent in the resource.
- Interpretive Activities Hikes, talks, tours or demonstrations that provide the participants with information and inspiration on a given natural or cultural resource. Participants learn and discover new ideas or concepts about the subject.
- Lead Agency The governmental agency responsible for compliance with CEQA for a proposed project. Generally, it is the agency with the broadest permit discretion for the project or the agency actually carrying out the project. For example, California State Parks is the Lead Agency for Departmental projects, and has the authority to approve its own projects, even though permits may also be required from other agencies. See California Environmental Quality Act (CEQA).
- Lifeways A technical term for a customary manner of living; a way of life or the traditional lifeways of a tribal society.
- **Liquefaction** In cohensionless (sand and silt) soil, the transformation from solid to a liquid state due to increased pore water pressure and resulting reduction of effective stress (loss of soil strength). Often induced by earthquake shaking.

- Management Plans In California State Parks, management plans define the objectives, methodologies, and/or designs regarding how management goals will be accomplished. Occurring on an as-needed basis, they are typically focused on specific management topics, goals, or issues. Depending on their focus, the plans can apply to all or part of a unit. Management plans are consistent with system-wide plans and policies, and with the unit's general plan. See Specific Plan.
- Master Plan Master plans are tangible statements of where the park is now, what it should be in the future and what is required to get there. While circumstances vary from place to place, the decision to develop a master plan is often determined by the need to understand the current conditions of the park, to generate and build community interest and participation, to create a new and common vision for the park's future, and/or to develop a clear and solid set of recommendations and implementation strategies. See General Plan.
- Mitigate, Mitigation To ameliorate, alleviate, or avoid to the extent reasonably feasible usually impacts to the environment associated with a project or undertaking. According to CEQA, mitigation for environmental impacts include: (a) avoiding an impact by not taking a certain action or parts of an action; (b) minimizing an impact by limiting the degree or magnitude of the action and its implementation; (c) rectifying an impact by repairing, rehabilitating or restoring the environment affected; (d) reducing or eliminating an impact by preserving and maintaining operations during the life of the action; (e) compensating for an impact by replacing or providing substitute resources or environments. Refer also to Section 106 of the National Historic Protection Act.
- Mitigation Measure Under the California Environmental Quality Act (CEQA), when an environmental impact or potential impact is identified, measures must be proposed that will eliminate, avoid, rectify, reduce or compensate for those environmental effects.
- Multi-use or Multi-purpose Trail An appropriately surfaced trail intended as a circulation connection for a variety of uses (bicycle, hiking, pedestrian).
- Native Species A plant or animal that is historically indigenous to a specific area.
- Non-native Species Introduced species or exotic species; refers to plants and animals that originate in other regions of the world and are brought into a new region, where they may dominate the local species or in some way negatively impact the environment for native species. Also known as non-indigenous species. See Exotic Species.
- Orographic Ascending airflow caused by topography such as mountains.

Appendix M: Glossary M-5

- Pleistocene An epoch of the Quaternary Period, after the Pliocene of the Tertiary and before the Holocene. It began 1.6 million years ago and lasted until about 8,000 years ago (Holocene). Synonym: ice age: glacial epoch.
- Population bottleneck [Evolution] Genetic drift that occurs as a result of a drastic reduction in population by an event having little to do with the forces of natural selection. (Parker, Sybil, ed. McGraw-Hill Dictionary of Bioscience. New York: 1997). When a population is small, this "genetic drift" can eliminate gene variations that might have helped the species withstand future pressures on the population, such as climate change or diseases.
- Province A broadly defined geographical area. It is a term that helps predict where plant species can be expected to grow.
- Public Resources Code (PRC) California law that addresses natural, cultural, aesthetic, and recreational resources of the State, in addition to the State Constitution and Statutes.
- Quaternary The most recent period of the Cenozoic era, encompassing the time interval of 1.6 million years ago through today. See geologic time scale.
- Riparian (land or area) The strip of land adjacent to a natural watercourse such as a river or stream. Often supports vegetation that provides fish habitat when growing large enough to overhang the bank.
- **Runoff** That portion of rainfall or surplus water that does not percolate into the ground and flows overland and is discharged into surface drainages or bodies of water.
- Sand Loose particles of rock or mineral that range from 0.0625-2.0 millimeters in diameter.
- Scenic Corridor A transportation corridor, bikeway or waterway of outstanding scenic beauty, warranting special scenic conservation treatment.
- Significant Effect A substantial, or potentially substantial, adverse change in the environment.
- Silt Loose particles of rock or mineral that range from 0.002-0.0625 millimeters in diameter.
- **Speciation** The evolutionary process by which new biological species arise.
- Specific Plan A tool for detailed design and implementation of a defined portion of the area covered by a General Plan. Specific plans put the provisions of the local general plan into action.

- **Stakeholder** Group or individual who can affect, or is affected by, the achievement of the jurisdiction or organization's mission; examples include managers, employees, policy makers, suppliers, vendors, citizens, users, community activists, businesses, and community groups; and who should have a right to participate in the decision-making process.
- Sustainable Design To locate, design, reconstruct, construct, rehabilitate, renovate, operate, and maintain built environments that are models of energy, water, and materials efficiency, while providing healthy, productive, and comfortable habitable environments and long term benefits. This design approach is sometimes called "green design" or "green technology."
- Tiered Approach (Tiering) In General Plans, used to meet the requirement of CEQA. The first tier EIR will be prepared for the general plan. Subsequent management plans, area development plans, and specific project plans, implementing the general plan may be subject to additional environmental review (second and third tiers, etc.) The degree of specificity will reflect the level of detail in the general plan and subsequent plans. See California Environmental Quality Act, Environmental Impact Report, and General Plan.
- Unit Data File (UDF) In California State Parks, the working file that contains an organized body of information about a unit, and references the location of other information. It acts as an organized library of both unit data and the status of current issues.
- Viewshed The total area within a view from a defined observation point.
- **Vision Statement** A vision statement is a compelling image (description) of a desirable state of reality made possible by accomplishing the mission in a way that is consistent with the core values of key stakeholders. The vision statement is an inspiring view of the preferred future.
- Watershed The total area above a given point on a waterway that contributes water to its flow; the entire region drained by a waterway or watercourse that drains into a lake, reservoir, or other body of water. A watershed may, and often does, cover a very large geographical region.

Appendix M: Glossary M-7

Preliminary General Plan and Draft EIR March 2008

Preliminary General Plan and Draft EIR Año Nuevo State Park and State Natural Reserve



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Figure 14	Inland Proposals		
Figure 15	Proposed Preserves		

Preliminary General Plan and Draft EIR Año Nuevo State Park and State Natural Reserve March 2008

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